read

$$\sigma_{\text{int}}=[2\pi^2e^2\hbar/(Mc)]\Big\{NZ/A-[Mx/(3\hbar^2)]\times\int\Psi_0^*\sum_{i,j}V(r_{ij})r_{ij}^2P_{ij}^M\Psi_0d\tau-[My/(3\hbar^2)]\times\int\Psi_0^*\sum_{i,j}V(r_{ij})r_{ij}^2P_{ij}^H\Psi_0d\tau\Big\}.$$

(iii) In Eq. (4), for

$$\sigma_b=(4\pi^2/3)[e^2/(\hbar c)][zN/(A-1)]R^2,$$

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PHYSICAL REVIEW VOLUME 128, NUMBER 6 DECEMBER 15, 1962

Author Index to Volumes 125, 126, 127, and 128

References with (E) are to Errata

Aamodt, R., K. M. Case, M. Rosenbaum, and P. F. Zweifel. Quasi-classical treatment of neutron scattering—**126**, 1165

Abeles, B., D. S. Beers, G. D. Cody, and J. P. Dismukes. Thermal conductivity of Ge-Si alloys at high temperatures—**125**, 44

Abraham, C. and A. Aharoni. Simple model for nucleation around dislocations—**128**, 2496

Abrahams, S. C., L. Guttman, and J. S. Kasper. Neutron diffraction determination of antiferromagnetism in fcc (γ) Fe—**127**, 2052

Adams, E. Dwight (see Thompson, A. Low.)—**128**, 509

Adams, J. Barclay. μ capture with six nucleon form factors—**126**, 1567

Adams, William H. Stability of Hartree-Fock states—**127**, 1650

Adler, Stephen L. Quantum theory of dielectric constant in real solids—**126**, 413

—— Theory of valence band splittings at $k=0$ in zincblende and wurtzite structures—**126**, 118

Adrian, Frank J. Effect of matrix interactions and buffer gases on atomic N hyperfine splitting—**127**, 837

Agdur, B., B. Keržar, and F. Sellberg. Noise radiation and scattering from cylindrical plasma column—**128**, 1

Agnew, Lewis (see Stone, Philip M.)—**127**, 1157

Agnew, Louis (see Elioff, Tommy)—**128**, 869

Agrawal, Bal Krishna and G. S. Verma. Dislocation contribution to elastic constants of bcc crystals—**127**, 501

—— **and G. S. Verma.** Lattice thermal conductivity at low temperatures—**126**, 24

—— **and G. S. Verma.** Lattice thermal conductivity of solid He—**128**, 603

Aharoni, A., E. H. Frei, and M. Schieber. Curie point and origin of weak ferromagnetism in hematite—**127**, 439

—— (see Abraham, C.)—**128**, 2496

Aharonov, Y. and D. Bohm. Remarks on possibility of quantum electrodynamics without potentials—**125**, 2192

Aigrain, P. (see Pankove, J. I.)—**126**, 956

Albert, Richard D. (see Hansen, Luisa F.)—**128**, 291

Alder, B. J. and T. E. Wainwright. Phase transition in elastic disks—**127**, 359

Alexander, John M. and David H. Sisson. Recoil range evidence for compound-nucleus mechanism in reactions between complex nuclei—**128**, 2288

—— (see Singh, Sarjant)—**128**, 711

Alexander, P. and R. M. Steffen. Nuclear matrix elements in first-forbidden β decay of Eu^{155} ground state—**128**, 1783

Alexander, S. Symmetry considerations in determination of magnetic structures—**127**, 420

Alexeff, I. and R. V. Neidigh. Experimental observation of plasma electron pressure—**127**, 1

Alford, W. Parker (see Taketani, H.)—**125**, 291

Alfred, L. C. R. Shells and electron groups in Thomas-Fermi atom—**125**, 214

Ali, A. W. (see Berg, H. F.)—**125**, 199

Allaby, J. V., A. Chisholm, J. Eades, and B. M. Townes. Bound muon decay-rate anomaly—**125**, 2077

Allard, James G. (see Hughes, Floyd)—**125**, 173

Allas, R. G., R. W. Bercaw, and F. B. Shull. Polarization of protons in $Be^9(d,p)Be^{10}$—**127**, 1252

—— **and F. B. Shull.** Polarization of protons in $C^{12}(d,p)C^{13}$—**125**, 941

Allen, F. G. and G. W. Gobeli. Work function, photoelectric threshold, and surface states of atomically clean Si—**127**, 150

—— (see Gobeli, G. W.)—**127**, 141

Allison, S. K., J. Cuevas, and M. Garcia-Munoz. Partial atomic stopping power of gaseous H_2 for H beams. I—**127**, 792

Almeleh, Nissim and Bernard Goldstein. Electron paramagnetic resonance of Mn in GaAs—**128**, 1568

Almodovar, Ismael (see Macfarlane, Ronald D.)—**127**, 1665

Alpert, Seymour S., Edgar Lipworth, Matthew B. White, and Kenneth F. Smith. Hfs and nuclear moments of RaE (Bi^{210})—**125**, 256

Alvarez, L. W. (see Stevenson, M. L.)—**125**, 687; **125**, 2208(E)

Amado, R. D. New methods in direct interaction theory—**127**, 261

Amaldi, Ugo, Jr., and Franco Selleri. Nucleon-nucleon diffraction scattering—**128**, 2772

Anderson, A. C., W. Reese, and J. C. Wheatley. Magnetic properties of He^3 at low temperatures—**127**, 671

read

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PHYSICAL REVIEW VOLUME 128, NUMBER 6 DECEMBER 15, 1962

Author Index to Volumes 125, 126, 127, and 128

References with (E) are to Errata

Aamodt, R., K. M. Case, M. Rosenbaum, and P. F. Zweifel. Quasi-classical treatment of neutron scattering—**126**, 1165

Abeles, B., D. S. Beers, G. D. Cody, and J. P. Dismukes. Thermal conductivity of Ge-Si alloys at high temperatures—**125**, 44

Abraham, C. and A. Aharoni. Simple model for nucleation around dislocations—**128**, 2496

Abrahams, S. C., L. Guttman, and J. S. Kasper. Neutron diffraction determination of antiferromagnetism in fcc (γ) Fe—**127**, 2052

Adams, E. Dwight (see Thompson, A. Low.)—**128**, 509

Adams, J. Barclay. μ capture with six nucleon form factors—**126**, 1567

Adams, William H. Stability of Hartree-Fock states—**127**, 1650

Adler, Stephen L. Quantum theory of dielectric constant in real solids—**126**, 413

—— Theory of valence band splittings at $k=0$ in zincblende and wurtzite structures—**126**, 118

Adrian, Frank J. Effect of matrix interactions and buffer gases on atomic N hyperfine splitting—**127**, 837

Agdur, B., B. Keržar, and F. Sellberg. Noise radiation and scattering from cylindrical plasma column—**128**, 1

Agnew, Lewis (see Stone, Philip M.)—**127**, 1157

Agnew, Louis (see Elioff, Tommy)—**128**, 869

Agrawal, Bal Krishna and G. S. Verma. Dislocation contribution to elastic constants of bcc crystals—**127**, 501

—— **and G. S. Verma.** Lattice thermal conductivity at low temperatures—**126**, 24

—— **and G. S. Verma.** Lattice thermal conductivity of solid He—**128**, 603

Aharoni, A., E. H. Frei, and M. Schieber. Curie point and origin of weak ferromagnetism in hematite—**127**, 439

—— (see Abraham, C.)—**128**, 2496

Aharonov, Y. and D. Bohm. Remarks on possibility of quantum electrodynamics without potentials—**125**, 2192

Aigrain, P. (see Pankove, J. I.)—**126**, 956

Albert, Richard D. (see Hansen, Luisa F.)—**128**, 291

Alder, B. J. and T. E. Wainwright. Phase transition in elastic disks—**127**, 359

Alexander, John M. and David H. Sisson. Recoil range evidence for compound-nucleus mechanism in reactions between complex nuclei—**128**, 2288

—— (see Singh, Sarjant)—**128**, 711

Alexander, P. and R. M. Steffen. Nuclear matrix elements in first-forbidden β decay of Eu^{155} ground state—**128**, 1783

Alexander, S. Symmetry considerations in determination of magnetic structures—**127**, 420

Alexeff, I. and R. V. Neidigh. Experimental observation of plasma electron pressure—**127**, 1

Alford, W. Parker (see Taketani, H.)—**125**, 291

Alfred, L. C. R. Shells and electron groups in Thomas-Fermi atom—**125**, 214

Ali, A. W. (see Berg, H. F.)—**125**, 199

Allaby, J. V., A. Chisholm, J. Eades, and B. M. Townes. Bound muon decay-rate anomaly—**125**, 2077

Allard, James G. (see Hughes, Floyd)—**125**, 173

Allas, R. G., R. W. Bercaw, and F. B. Shull. Polarization of protons in $Be^9(d,p)Be^{10}$—**127**, 1252

—— **and F. B. Shull.** Polarization of protons in $C^{12}(d,p)C^{13}$—**125**, 941

Allen, F. G. and G. W. Gobeli. Work function, photoelectric threshold, and surface states of atomically clean Si—**127**, 150

—— (see Gobeli, G. W.)—**127**, 141

Allison, S. K., J. Cuevas, and M. Garcia-Munoz. Partial atomic stopping power of gaseous H_2 for H beams. I—**127**, 792

Almeleh, Nissim and Bernard Goldstein. Electron paramagnetic resonance of Mn in GaAs—**128**, 1568

Almodovar, Ismael (see Macfarlane, Ronald D.)—**127**, 1665

Alpert, Seymour S., Edgar Lipworth, Matthew B. White, and Kenneth F. Smith. Hfs and nuclear moments of RaE (Bi^{210})—**125**, 256

Alvarez, L. W. (see Stevenson, M. L.)—**125**, 687; **125**, 2208(E)

Amado, R. D. New methods in direct interaction theory—**127**, 261

Amaldi, Ugo, Jr., and Franco Selleri. Nucleon-nucleon diffraction scattering—**128**, 2772

Anderson, A. C., W. Reese, and J. C. Wheatley. Magnetic properties of He^3 at low temperatures—**127**, 671

Anderson, A. G. Nuclear spin absorption spectra in solids—125, 1517
—— **and S. R. Hartmann.** Nuclear magnetic resonance in demagnetized state. II—128, 2023
Anderson, C. E. (see Ladenbauer-Bellis, Inge-Maria)—125, 606
Anderson, H. L. (see Johnson, C. Scott)—125, 2102
Anderson, J. D., C. Wong, and J. W. McClure. Isobaric states in nonmirror nuclei—126, 2170
—— (see Gardner, C. C.)—125, 626
—— (see Stuart, T. P.)—125, 276
—— (see Wong, C.)—128, 2339
Anderson, P. W. (see Klauder, J. R.)—125, 912
—— (see Morel, P.)—125, 1263
Anderson, Robert L., Suraj N. Gupta, and John Huschilt. Effect of pion-pion interaction on nuclear forces—127, 1377
Andreassi, G., G. Calucci, G. Furlan, G. Peressutti, and P. Cazzola. Radiative corrections to total cross section for annihilation of pair into photons—128, 1425
Andrews, Frank C. Approach to equilibrium in dense classical fluid—125, 1469
—— Evolution of reduced distribution functions for inhomogeneous dense classical fluids—125, 1473
—— Exact evolution of reduced distribution functions in homogeneous dense classical fluid—125, 1461
Antonov-Romanovsky, V. V. Application of diffusion theory to bimolecular reactions—125, 1
Appel, Joachim. Interband electron-electron scattering and transport phenomena in semiconductors—125, 1815
—— **and Ralph Bray.** Effect of hole-hole scattering on mobility of p-type Ge—127, 1603
Arai, Tadashi. Exchange interaction and Heisenberg's spin Hamiltonian—126, 471
Arakawa, E. T. (see Frank, A. L.)—126, 1947
Arase, T. (see Brockhouse, B. N.)—128, 1099
Argyres, Petros N. Theory of tunneling and its dependence on longitudinal magnetic field—126, 1386
Armstrong, J. A., N. Bloembergen, J. Ducuing, and P. S. Pershan. Interactions between light waves in nonlinear dielectric—127, 1918
Armstrong, J. C., Jr. (see Hicks, H. G.)—128, 700
Arnold, G. and N. Nereson. Neutron coherent scattering amplitudes for Cd and Eu—126, 2262(E)
—— (see Nereson, N. G.)—127, 2101
Arnold, K. W. (see von Engel, A.)—125, 803
Arnold, R. C. and J. J. Sakurai. Vector mesons and KN, $\bar{K}N$ interactions—128, 2808
Arnowitt, R. L. and S. I. Fickler. Quantization of Yang-Mills field—127, 1821
—— **and J. Mazo.** Global symmetry resonance in pion-hyperon scattering—125, 744
Asaro, F. (see Perlman, I.)—127, 917
Asawa, C. K. and R. A. Satten. Direct optical detection of ground-state population changes of Nd in ethylsulfate crystals—127, 1542
Ascarelli, G. and S. Rodriguez. Recombination of electrons and donors in n-type Ge. B—127, 167
Asdente, M. Fermi surface for $3d$ band of Cr—127, 1949
—— **and J. Friedel.** $3d$ band structure of Cr—126, 2262(E)
Atkins, K. R. (see Pollack, S. R.)—125, 1248
Atkinson, D. Prediction of pion phase shifts—128, 1908
Auffray, J. P. Magnetic susceptibility of H_2 molecule—126, 146
Aukerman, L. W. and R. D. Graft. Annealing of electron-irradiated GaAs—127, 1576
Aurivillius, Bengt and P. H. Fang. Ferroelectricity in compound $Ba_2Bi_4Ti_5O_{18}$—126, 893
—— (see Fang, P. H.)—126, 892
Austern, N., R. M. Drisko, E. Rost, and G. R. Satchler. Distorted-waves theory of double-excitation by inelastic scattering—128, 733
Austin, B. J., V. Heine, and L. J. Sham. General theory of pseudopotentials—127, 276
Austin, S. M., H. H. Barschall, and R. E. Shamu. Scattering of neutrons by α particles—126, 1532
Axel, Peter. Electric dipole ground-state transition width strength function and 7-MeV photon interactions—126, 671
—— (see Euthymiou, P.)—128, 274
—— (see O'Connell, J. S.)—126, 228
Azuna, R. E. (see Lewis, G. M.)—125, 378

Bacon, B. M. (see Barfield, W. D.)—125, 964
Bahcall, John N. β decay in stellar interiors—126, 1143
—— Electron capture and nuclear matrix elements of Be^7—128, 1297
Baierlein, Ralph F., David H. Sharp, and John A. Wheeler. Three-dimensional geometry as carrier of information about time—126, 1864
Bailyn, M. Maximum variational principle for conduction problems in magnetic fields and theory of magnon drag—126, 2040
—— (see Franzak, E.)—126, 2033
Bair, J. K. and H. B. Willard. Level structure in Ne^{22} and Si^{30} from reactions $O^{18}(\alpha,n)Ne^{21}$ and $Mg^{26}(\alpha,n)Si^{29}$—128, 299
Baker, D. J., Jr., and D. H. Tomboulian. Photoelectric K-absorption cross section of Li—128, 677
Baker, E. W. and S. Katcoff. Fission of Ag and Br in nuclear emulsion by 1.0–3.0-Bev protons—126, 729
Baker, George A., Jr. Certain general order-disorder models in limit of long-range interactions—126, 2071
—— Relationship between velocity-dependent potentials and hard-core potentials—128, 1485
——, **J. L. Gammel, B. J. Hill, and John G. Wills.** Exact numerical solution of three-body ground-state problem—125, 1754
Baker, M. and R. Blankenbecler. Unitarity and high-energy inelastic scattering—128, 415
—— **and S. L. Glashow.** Spontaneous breakdown of elementary particle symmetries—128, 2462
Baker, S. D. (see McIntyre, J. A.)—125, 584
—— (see Wang, K. H.)—127, 187
Balázs, Louis A. P. Dispersion-theoretical fitting of nucleon-nucleon scattering—125, 2179
—— $I=1/2$, $J=1/2$ state in πN scattering with nucleon as bound state—128, 1935
—— Low-energy pion-pion scattering—128, 1939
Baldini, Giancarlo. Uv absorption of solid Ar, Kr, and Xe—128, 1562
Ball, J. B. (see Goodman, C. D.)—127, 574
Ball, J. S., W. R. Frazer, and M. Nauenberg. Scattering and production amplitudes with unstable particles—128, 478
Balluffi, R. W. (see Simmons, R. O.)—125, 862
Ban, N. T., C. M. Randall, and D. J. Montgomery. Effect of isotopic mass on viscosity of molten Li—128, 6
Bannister, F. J. (see Watt, D. E.)—126, 264
Baraff, G. A. Distribution functions and ionization rates for hot electrons in semiconductors—128, 2507
Baranger, M. (see Griem, H. R.)—125, 177
Barber, W. C. (see Dodge, W. R.)—127, 1746
—— (see Peterson, G. A.)—128, 812
Bardakci, K. Complex angular momentum in field theory—127, 1832
Bardin, R. K. C. A. Barnes, W. A. Fowler, and P. A. Seeger. ft value of O^{14} and universality of Fermi interaction—127, 583
Bardon, Marcel, Paolo Franzini, and Juliet Lee. Mott scattering of polarized muons—126, 1826

Barfield, W. D., B. M. Bacon, and L. C. Biedenharn. Deuteron stripping by heavy nuclei—**125**, 964
Barkas, Walter H. Information content of particle tracks—**127**, 2287(E)
—— (see Shwe, Hla)—**125**, 1024
Barker, A. S., Jr., and M. Tinkham. Far infrared ferroelectric vibration mode in $SrTiO_3$—**125**, 1527
Barloutaud, R. (see Goldring, G.)—**127**, 2151
Barnes, C. A. (see Bardin, R. K.)—**127**, 583
—— (see Nordberg, M. E., Jr.)—**125**, 321
Barnes, R. G. (see Hultsch, R. A.)—**125**, 1832
—— (see Yamaka, E.)—**125**, 1568
Barrett, E. B. (see Whitmer, R. F.)—**125**, 1478
Barrett, P. (see Nagle, D. E.)—**125**, 490
Barrett, R. C. Pairing energies of heavy nuclei—**127**, 1670
Barron, T. H. K. and M. L. Klein. Thermal and elastic properties of crystals at low temperatures—**127**, 1997
Barschall, H. H. (see Austin, S. M.)—**126**, 1532
Barsella, B. and E. Fabri. Angular momenta in relativistic many-body problems—**128**, 451
—— **and E. Fabri.** Angular momenta in relativistic three-body systems—**126**, 1561
Barshay, Saul. Theory of P-wave π-Λ resonance—**126**, 1232; **127**, 2287(E)
—— **and Iso, C.** Interference effects in decay of neutral K mesons: $K^0 \to \pi+\pi+\gamma$—**125**, 2168
Bartlett, A. A. (see Wilson, R. R.)—**125**, 1655
Barut, A. O. Analyticity in angular momentum of relativistic many-channel S matrix from dispersion relations and unitarity—**128**, 1959
—— Formulation of scattering functions in terms of unitary representations of inhomogeneous Lorentz group—**127**, 321
—— Virtual particles—**126**, 1873
—— **and F. Calogero.** Singularities in angular momentum of scattering amplitude for class of soluble potentials—**128**, 1383
—— **and D. E. Zwanziger.** Complex angular momentum in relativistic S-matrix theory—**127**, 974
Bashkin, S. (see Berkowitz, E.)—**128**, 247
Bassani, Franco, John Robinson, Bernard Goodman, and J. R. Schrieffer. Projected wave-field approach to many-electron problem in solids—**127**, 1969
Bassel, R. H., G. R. Satchler, R. M. Drisko, and E. Rost. Analysis of inelastic scattering of α particles. I—**128**, 2693
Basu, B. (see Patro, A. P.)—**127**, 1258
Batterman, Boris W. Effect of thermal vibrations on diffraction from perfect crystals. I. Case of anomalous transmission—**126**, 1461
—— Effect of thermal vibrations on diffraction from perfect crystals. II. Bragg case of reflection—**127**, 686
—— **and David R. Chipman.** Vibrational amplitudes in Ge and Si—**127**, 690
Bauer, Charles L. and Robert B. Gordon. Structure sensitivity of F-center generation by x rays at low temperatures—**126**, 73
Bauer, R. W. and M. Deutsch. Magnetic moments of first excited 2+ states in Sm^{152}, Gd^{154}, and Gd^{156}—**128**, 751
——, **L. Grodzins, and H. H. Wilson.** Decay of Tl^{199} and Au^{199}—**128**, 694
Bauer, Walter, John W. DeFord, James S. Koehler, and John W. Kauffman. Low-temperature annealing spectrum of electron-irradiated Au and Cd—**128**, 1497
Baum, James H. (see Boley, Forrest I.)—**126**, 734
Baym, Gordon. Self-consistent approximations in many-body systems—**127**, 1391
Beall, E. F., B. Cork, P. G. Murphy, W. A. Wenzel, C. M. P. Johnson, and L. J. Koester, Jr. Polarization in π^--p scattering between 500 and 940 MeV—**126**, 1554
Bean, C. P. and D. S. Rodbell. Magnetic disorder as first-order phase transformation—**126**, 104
Beattie, Alan R. and R. W. Cunningham. Large-signal photomagnetoelectric effect—**125**, 533
Beck, Paul A. (see Cheng, C. H.)—**126**, 2030
—— (see Lounasmaa, O. V.)—**128**, 2153
—— (see Starke, E. A., Jr.)—**126**, 1746
Becker, Richard L. Nonsingular formulation of Brueckner approximation for infinite Fermi system—**127**, 1328
Bederson, Benjamin (see Perel, Julius)—**128**, 1148
Beers, D. S. (see Abeles, B.)—**125**, 44
Bég, Mirza A. Baqi and Paul C. DeCelles. Current conservation and $|\Delta T| = 1/2$ rule in θ decay—**128**, 386
Behrendt, D. R. (see Hoekstra, P.)—**128**, 560
Belford, Geneva G., Aron Kuppermann, and T. E. Phipps. Application of numerical methods to theory of periodic deviations in Schottky effect—**128**, 524
Belinfante, Frederik J. Consequences of postulate of complete commuting set of observables in quantum electrodynamics—**128**, 2832
—— **and J. C. Garrison.** Uniqueness of Fock's harmonic coordinate systems—**125**, 1124
Belinfante, Johan G. Impulse approximation—**128**, 2403
Bell, R. O. (see Rupprecht, G.)—**125**, 1915
Bender, P. L. Comparison of Rb^{87} and proton Zeeman transition frequencies in earth's magnetic field—**128**, 2218
Bendt, Philip J. Superfluid He critical velocities in rotating annulus—**127**, 1441
—— (see Flynn, E. R.)—**128**, 1268
Benioff, Paul A. Effect of optical potential on nucleon momentum distribution in nuclei. Pickup reaction—**128**, 740
Beniston, M. J. (see Jones, B. D.)—**127**, 236
Bennett, Lawrence H. and Ralph L. Streever, Jr. Nuclear moment of Ni^{61}—**126**, 2141
—— (see Streever, R. L.)—**128**, 1632
Bennett, W. R., Jr. Hole burning effects in He-Ne optical maser—**126**, 580
Benoit, H. (see Ruby, R. H.)—**127**, 51
Bent, R. D., D. E. Blatchley, and W. W. Eidson. 4.48-MeV level of Ca^{40}—**127**, 2188
—— (see Eidson, W. W.)—**127**, 913; **128**, 1312
Benton, E. E., E. E. Ferguson, F. A. Matsen, and W. W. Robertson. Cross sections for de-excitation of He metastable atoms by collisions with atoms—**128**, 206
Bercaw, R. W. (see Allas, R. G.)—**127**, 1252
Berg, H. F., A. W. Ali, R. Lincke, and H. R. Griem. Measurement of Stark profiles of neutral and ionized He and H lines from shock-heated plasmas in electromagnetic T tubes—**125**, 199
Bergmann, Peter G., Ivor Robinson, and Engelbert Schücking. Asymptotic properties of system with nonzero total mass—**126**, 1227
—— (see Willis, Charles R.)—**128**, 391
Berinde, A. (see Hulubei, H.)—**126**, 2174
Berko, Stephen. Band structure and positron annihilation in metals: Be and Mg—**128**, 2166
—— (see Hudson, Cecil I., Jr.)—**128**, 1271
Berkowitz, Edward H. γ rays resulting from Li bombardments of Li—**126**, 2168
——, **S. Bashkin, R. R. Carlson, S. A. Coon, and E. Norbeck.** γ radiation from Li-Li nuclear reactions—**128**, 247
Berlin, T. H. (see Gersch, H. A.)—**127**, 2276
Berlincourt, T. G., R. R. Hake, and A. C. Thorsen. Pulsed magnetic field studies of negative magnetoresistivities of dilute Ti-Mn and Cu-Mn alloys at low temperatures—**127**, 710
—— (see Hake, R. R.)—**127**, 170
Bernard, William. Irreversible thermodynamics of steady-state processes—**128**, 421
Bernstein, J. and G. Feinberg. Production and decay of intermediate vector mesons—**125**, 1741

Bernstein, Melvin J. Electron drift and diffusion measurements in H_2 and D_2 with crossed electric and strong magnetic fields—**127**, 335
—— Townsend ionization coefficient for H_2 in transverse strong magnetic field—**127**, 342
Berreth, J. R. (see Reich, C. W.)—**127**, 192
Berry, H. W. Energy distribution of electrons from ionizing collisions of atoms and ions—**127**, 1634
Bessis, N., H. Lefebvre-Brion, and C. M. Moser. Calculation of hyperfine constants for B^{11} and O^{17}—**128**, 213
Bethe, H. A. and T. Kinoshita. Behavior of Regge poles in potential at large energy—**128**, 1418
—— (see Leon, M.)—**127**, 636
Bhalla, C. P. and M. E. Rose. Finite nuclear size effects in β decay—**128**, 774
Bhat, M. R. and M. L. Pool. Radioactive decay of Tb^{157} and Tb^{158}—**127**, 1704
Bhattacherjee, S. K. and S. K. Mitra. β-γ directional correlation in Eu^{154}—**126**, 1154
Biavati, M. H., S. J. Nassiff, and C. S. Wu. Internal bremsstrahlung spectrum accompanying 1*s* electron capture in decay of Fe^{55}, Cs^{131}, and Tl^{204}—**125**, 1364
Biedenharn, L. C. Remarks on relativistic Kepler problem—**126**, 845
—— (see Barfield, W. D.)—**125**, 964
—— (see Griffy, T. A.)—**128**, 833
Bierman, Enid. Scattering of 6–24 MeV negative pions by H—**127**, 599
Bingham, F. W. and M. B. Sampson. Study of 83-neutron nuclei by deuteron stripping reactions—**128**, 1796
Biondi, M. A. (see Chanin, L. M.)—**128**, 219
Birge, R. W. (see Camerini, U.)—**128**, 362
Birk, M., A. E. Blaugrund, G. Goldring, E. Z. Skurnik, and J. S. Sokolowski. Lifetimes of some rotational levels—**126**, 726
Birkhoff, R. D. (see Frank, A. L.)—**126**, 1947
Birman, Joseph L. Configurational instability in solids: diamond and zinc blende—**125**, 1959
—— Space group selection rules: diamond and zinc blende—**127**, 1093
Bisi, A., A. Fiorentini, E. Gatti, and L. Zappa. Magnetic quenching of positronium in solids and positron helicity—**128**, 2195
Biswas, S. N. Anomalous magnetic moments of baryons in global symmetry model—**127**, 1350
——, C. E. Fichtel, and D. E. Guss. Study of H, He, and heavy nuclei in November 12, 1960 solar cosmic-ray event—**128**, 2756
Blair, A. G. and H. E. Wegner. Experimental study and distorted-wave predictions for (He^3,α) reaction on Fe isotopes—**127**, 1233
Blair, J. M. and R. K. Hobbie. Differential cross sections for reactions $C^{12}(Li^6,p)O^{17}$ and $C^{13}(Li^6,d)O^{18}$ from 3.4 to 4.0 MeV—**128**, 2282
Blair, J. S., D. Sharp, and L. Wilets. Inelastic scattering by deformed nuclei—**125**, 1625
Blakemore, J. S. and K. C. Nomura. Intrinsic optical absorption in Te—**127**, 1024
Blankenbecler, R. Effect of 3π resonance on 2π resonance—**125**, 755
——, L. F. Cook, Jr., and M. L. Goldberger. Regge poles in high-energy electron scattering—**128**, 2440
—— **and M. L. Goldberger.** Behavior of scattering amplitudes at high energies, bound states, and resonances—**126**, 766
——**and Jan Tarski.** Isoscalar nucleon structure—**125**, 782
—— (see Baker, M.)—**128**, 415
Blatchley, D. E. (see Bent, R. D.)—**127**, 2188
Blatt, John M., K. W. Böer, and Werner Brandt. Bose-Einstein condensation of excitons—**126**, 1691
Blaugher, R. D. and J. K. Hulm. Superconducting, critical field of single-crystal Mo_3Re—**125**, 474
Blaugrund, A. E. (see Birk, M.)—**126**, 726
Bleuler, E. (see Carpenter, R. D.)—**125**, 282
—— (see Wong, S. S. M.)—**125**, 280
Blinc, R. (see Miller, S. R.)—**126**, 528
Bloch, F. and H. E. Rorschach. Energetic stability of persistent currents in long hollow cylinder—**128**, 1697
Bloembergen, N. and P. S. Pershan. Light waves at boundary of nonlinear media—**128**, 606
—— (see Armstrong, J. A.)—**127**, 1918
Bloom, Stewart D., Lloyd G. Mann, and John A. Miskel. Isospin conservation and β-γ circular-polarization correlation in mixed transitions—**125**, 2021
—— (see Mann, Lloyd G.)—**127**, 2134
Blount, E. I. Bloch electrons in magnetic field—**126**, 1636
—— Extension of Foldy-Wouthuysen transformation—**128**, 2454
Bludman, Sidney A. and James A. Young. Electromagnetic production of charged vector mesons—**126**, 303
Blue, M. H., J. J. Lord, J. G. Parks, and C. H. Tsao. Proton-proton collisions at 4.2 BeV—**125**, 1386
Blum, Haywood. Question of paramagnetism of *M* center in NaF—**128**, 627
—— (see Holton, W. C.)—**125**, 89
Blumberg, R. H. (see Douglass, D. H., Jr.)—**127**, 2038
Blume, M. and R. Orbach. Spin-lattice relaxation of *S*-state ions: Mn^{++} in cubic environment—**127**, 1587
Bodansky, D., R. K. Cole, W. G. Cross, C. R. Gruhn, and I. Halpern. Evaporation of coincident protons in α+Ni^{58} reactions—**126**, 1082
Boehm, F. (see Seppi, E. J.)—**128**, 2334
Böer, K. W. (see Blatt, John M.)—**126**, 1691
Bohm, David (see Aharonov, Y.)—**125**, 2192
Bohm, Henry V. and Vernon J. Easterling. Magnetoacoustic measurements in noble metals at 350 Mc/sec—**128**, 1021
—— (see Easterling, Vernon J.)—**125**, 812
Bohr, A. and B. R. Mottelson. Quantization and stability of currents in superconductors—**125**, 495
Boley, Forrest I., John A. Palsedge, and James H. Baum. Altitude dependence of longitudinal distribution of atmospheric Čerenkov radiation—**126**, 734
Bolotin, H. H. (see Chrien, R. E.)—**127**, 1680
Bolsterli, M. (see Kromminga, A. J.)—**128**, 2887
Bonner, N. A., W. Goishi, W. H. Hutchin, G. M. Iddings, and H. A. Tewes. Half-lives of Tm^{167}, Tm^{168}, Tm^{170}, Lu^{171}, Lu^{172}, Lu^{173}, Lu^{174}, Lu^{174m}, Au^{196}, and Au^{196m}—**127**, 217
Bonner, T. W. (see St. Romain, F. A.)—**126**, 1794
Boorse, H. A. (see Hirshfeld, A. T.)—**127**, 1501
Borchers, R. R. (see Lefevre, H. W.)—**128**, 1328
Boulware, David G. and Walter Gilbert. Connection between gauge invariance and mass—**126**, 1563
Bowen, Lawrence H. and John W. Irvine, Jr. Nuclear excitation functions and thick-target yields: F^{19}, Na^{23}, $As^{75}(d,t)$ and Na^{23}, $As^{75}(d,p)$—**127**, 1698
Bowers, R. (see Rose, F. E.)—**127**, 1122
—— (see Woods, A. D. B.)—**128**, 1112
Bowers, V. A. (see Jen, C. K.)—**126**, 1749
Bowman, Allen L. (see Giorgi, A. L.)—**125**, 837
Bowman, Harry R., Stanley G. Thompson, J. C. D. Milton, and Wladyslaw J. Swiatecki. Velocity and angular distributions of prompt neutrons from spontaneous fission of Cf^{252}—**126**, 2120
Boyarski, A. M., E. C. Loh, L. Q. Niemela, D. M. Ritson, R. Weinstein, and S. Ozaki. Study of K^+ decay—**128**, 2398
Boyd, G. D. (see Johnson, L. F.)—**126**, 1406
Boyle, W. S. (see Kunzler, J. E.)—**128**, 1084
Bozowski, S. (see Gittleman, J. I.)—**128**, 646
Braden, C. H. (see Dulaney, Harry)—**125**, 1620

Brady, F. P. and E. K. Warburton. $C^{14}(p,\alpha)B^{11}$ angular distributions at $E_p=18$ MeV—128, 790
Braid, T. H. (see Broek, H. W.)—126, 1514
Brailsford, A. D. Abrupt-kink model of dislocation motion. II—128, 1033
Bramblett, R. L. (see Fultz, S. C.)—127, 1273; 128, 2345
—— (see St. Romain, F. A.)—126, 1794
Bramlitt, E. T., R. W. Fink, D. G. Gardner, and A. Poularikas. Cross-section limits for occurrence of (n,He^3) reaction at 14.5 MeV—125, 297
Brandhorst, Henry W., Jr., and J. W. Cobble. Decay of Ru^{105}, Pd^{109}, and Rb^{86}—125, 1323
Brandt, Werner (see Blatt, John M.)—126, 1691
Brans, Carl H. Mach's principle and locally measured gravitational constant in general relativity—125, 388
—— Mach's principle and relativistic theory of gravitation. II—125, 2194
Branscomb, Lewis M. (see Seman, M. L.)—125, 1602
Bransden, B. H., I. R. Gatland, and J. W. Moffat. Pion-pion scattering including inelastic intermediate states—128, 859
Braunstein, R. Nonlinear optical effects—125, 475
Bray, Ralph (see Appel, Joachim)—127, 1603
—— (see Brown, Dale Marius)—127, 1593
Bray, T., G. C. Brown, Jr., and A. Kiel. Paramagnetic relaxation of Fe^{3+} in $K_3Co(CN)_6$—127, 730
Breene, R. G., Jr. Analytic wave functions. IV. Inclusion of correlation—128, 2190
Breit, G., M. H. Hull, Jr., K. E. Lassila, K. D. Pyatt, Jr., and H. M. Ruppel. Phase-parameter representation of proton-proton scattering from 9.7 to 345 MeV. II—128, 826
—— **and H. M. Ruppel.** Wave distortion for magnetic moment effects in nucleon-nucleon scattering—127, 2123
—— (see Hull, M. H., Jr.)—128, 830
—— (see Lassila, K. E.)—126, 881
Brenman, M. (see Miller, S. R.)—126, 528
Brennan, J. G. (see Smith, F. J.)—125, 971
Brenner, M. W., A. M. Hoogenboom, and E. Kashy. Nuclear energy levels in P^{29}—127, 947
Brice, M. K. (see Reich, C. W.)—127, 192
Brink, Gilbert O. Ionization of alkali atoms by electron bombardment—127, 1204
Brock, G. E. (see Fowler, A. B.)—128, 1664
Brockhouse, B. N., T. Arase, G. Caglioti, K. R. Rao, and A. D. B. Woods. Crystal dynamics of Pb. I. Dispersion curves at 100°K—128, 1099
—— (see Dolling, G.)—128, 1120
—— (see Watanabe, H.)—128, 67
—— (see Woods, A. D. B.)—128, 1112
Broek, H. W., T. H. Braid, J. L. Yntema, and B. Zeidman. Elastic and inelastic scattering of 43-MeV α particles by Ni^{58} and Ni^{60}—126, 1514
Broida, H. P. (see Radford, H. E.)—128, 231
Brolley, J. E., Jr. (see Stewart, Leona)—128, 707
Bron, W. E. Optical absorption and electron spin resonance after optical bleaching of F centers—125, 509
Broom, K. M. 14.5-MeV Neutron-induced fission of U^{238}—126, 627
Brophy, James J. and Samuel L. Webb. Critical fluctuations in triglycine sulfate—128, 584
Brown, Dale Marius and Ralph Bray. Analysis of lattice and ionized impurity scattering in p-type Ge—127, 1593
Brown, E. Role of orthogonalization in determination of valence states in crystals—126, 421
—— (see Goedecke, G. H.)—125, 2116
—— (see Johnson, R. A.)—127, 446
Brown, F. (see Watt, D. E.)—126, 264
Brown, G. C., Jr. (see Bray, T.)—127, 730
Brown, George A. (see Meyerhofer, Dietrich)—126, 1329
Brown, Laurie M. (see Kang, Ik-Ju)—128, 2828
Brown, Lynn B. and H. B. Knowles. α particles from Be^9 and C^{13} by 25-MeV α-particle bombardment—125, 1339
Brown, P. J. (see Frazer, B. C.)—125, 1283
Brown, Rodney D., III (see Koenig, Seymour H.)—128, 1668
Brown, Ronald E. Experimental study of $O^{17}(p,\alpha)N^{14}$ reaction and calculation of rate of this reaction in CNO cycle in stars—125, 347
Brown, William Fuller, Jr., and S. Shtrikman. Stability of one-dimensional ferromagnetic microstructures—125, 825
Browne, Cornelius P. Comparison of α-particle energies from Po^{210} and Po^{214} and energy of Po^{210} α particles—126, 1139
——, **W. E. Dorenbusch, and J. R. Erskine.** High-resolution study of $B^{10}(He^3,p)C^{12}$ reaction—125, 992
Brueckner, K. A. and K. S. Masterson, Jr. Nuclear matter calculations and phenomenological potentials—128, 2267
Brugger, H. R. (see Colley, D.)—128, 1930
Brugger, Robert M. Scattering of slow neutrons by solid and liquid terphenyls—126, 29
—— (see Schmunk, R. E.)—128, 562
—— (see Strong, K. A.)—125, 933
Bruninx, E. (see Rudstam, G.)—126, 1852
Brysk, Henry. New scattering approximation—126, 1589
Bube, Richard H., Edward L. Lind, and Arthur B. Dreeben. Properties of CdS crystals with high impurity concentrations—128, 532
—— **and Harold E. MacDonald.** Temperature dependence of photo-Hall effects in high-resistivity GaAs. I. One-carrier effects—128, 2062; II. Two-carrier effects—128, 2071
Bucher, W. P. (see Kent, D. W.)—125, 331
Buchsbaum, S. J. (see Platzman, P. M.)—128, 1004
Buck, B. Excitation of two-phonon states by inelastic α-particle scattering—127, 940
Buckingham, M. J. (see Butler, S. T.)—126, 1
Budd, Herbert. Chambers' solution of Boltzmann equation—127, 4
Buechner, W. W. (see Erskine, J. R.)—128, 720
—— (see Hoogenboom, A. M.)—128, 305
Buehler, E. (see Hauser, J. J.)—125, 142
Bunker, M. E., B. J. Dropesky, J. D. Knight, and J. W. Starner. Decay of Y^{92} and Nb^{92}—127, 844
Burde, J., M. Rakavy, and G. Engler. Absolute transition probabilities in odd-odd nucleus Pr^{144}—128, 325
Bureau, A. J. (see Clikeman, F. M.)—126, 1822
Burhop, E. H. S. (see Jones, B. D.)—127, 236
Burke, Philip and Harry M. Schey. Elastic scattering of low-energy electrons by atomic H—126, 147
—— **and H. M. Schey.** Polarization and correlation of electron spin in low-energy elastic electron-H collisions—126, 163
Burns, Gerald. Nuclear quadrupole resonance of Li in ferroelectric compounds—127, 1193
—— Shielding and crystal fields at rare earth ions—128, 2121
Burt, P. and Hugo D. Wahlquist. Spin and exchange corrections to plasma dispersion relations—125, 1785
—— **and W. K. R. Watson.** Determination of coupling strength of ρ mesons and nucleons—125, 1770
Butler, S. T. and M. J. Buckingham. Energy loss of fast ion in plasma—126, 1
Button, Janice, George R. Kalbfleisch, Gerald R. Lynch, Bogdan C. Maglić, Arthur H. Rosenfeld, and M. Lynn Stevenson. Pion-pion interaction in reaction $\bar{p}+p \to 2\pi^+ + 2\pi^- + n\pi^0$—126, 1858
—— **and Bogdan Maglić.** Experimental study of polarization and magnetic moment of antiproton—127, 1297

Cabezas, Amado Y., Ingvar P. K. Lindgren, Richard Marrus, and William A. Nierenberg. Hfs of Pr^{142}—126, 1004
Cable, J. W., M. K. Wilkinson, E. O. Wollan, and W. C. Koehler. Neutron diffraction investigation of magnetic order in MnI_2—125, 1860

——, **M. K. Wilkinson, E. O. Wollan, and W. C. Koehler.** Neutron diffraction study of antiferromagnetic $FeCl_2$—**127**, 714
——, **E. O. Wollan, W. C. Koehler, and H. R. Child.** Antiferromagnetism of antiphase domain structure of Pd_3Mn—**128**, 2118
—— (see Koehler, W. C.)—**126**, 1672
—— (see Wilkinson, M. K.)—**127**, 2080
Caglioti, G. (see Brockhouse, B. N.)—**128**, 1099
Caldwell, J. T. (see Fultz, S. C.)—**127**, 1273; **128**, 2345
Callaway, Joseph and Fred W. Cummings. Inelastic scattering of electrons in Ge—**126**, 5
—— **and A. James Hughes.** Moment singularity expansion for density of states—**128**, 134
—— **and Walter Kohn.** Electron wave functions in metallic Li—**127**, 1913
—— (see Wolfram, Thomas)—**127**, 1605
Callebaut, D. K. (see Voslamber, D.)—**128**, 2016
Calogero, F. (see Barut, A. O.)—**128**, 1383
Calucci, G. (see Andreassi, G.)—**128**, 1425
Camerini, U., W. F. Fry, J. A. Gaidos, H. Huzita, S. V. Natali, R. B. Wil'mann, R. W. Birge, R. P. Ely, W. M. Powell, and H. S. White. $K_1^0-K_2^0$ mass difference—**128**, 362
Cameron, L. M. (see Gutsche, G. D.)—**125**, 648
Campbell, E. C. (see Fowler, J. L.)—**127**, 2192
Caplinger, E. (see Marino, Lawrence L.)—**128**, 2243
—— (see Smith, A. C. H.)—**127**, 1647
Capps, Richard H. Coupling constants and unsubtracted dispersion relations—**128**, 2842
—— Resonance-interference method for determining $K\Sigma N$ parity—**126**, 1574
—— Σ^0 lifetime and associated photoproduction poles—**126**, 324
Cardona, Manuel and D. L. Greenaway. Reflectivity of gray Sn single crystals in fundamental absorption region—**125**, 1291
Cardwell, A. B. (see Fry, Richard K.)—**125**, 471
Caretto, Albert A., Jr. (see Merz, E. R.)—**126**, 1173
—— (see Morrison, David L.)—**127**, 1731
Caris, John C., Edward A. Knapp, Victor Perez-Mendez, and Walton A. Perkins. Positive-pion cross sections on complex nuclei—**126**, 295
Carleton, Nathaniel P. and Lawrence R. Megill. Electron energy distribution in slightly ionized air under influence of electric and magnetic fields—**126**, 2089
Carlson, R. R. (see Berkowitz, E.)—**128**, 247
Carmony, D. Duane and Remy T. Van de Walle. Determination of π-π cross sections by Chew-Low extrapolation method—**127**, 959
Carpenter, R. D., L. R. Mentillo, and E. Bleuler. Excitation curves for reactions of α particles with C^{12} from 15 to 19 MeV—**125**, 282
Carr, W. J., Jr. Ground-state energy of metallic H. I—**128**, 120
Carroll, C. O. (see Johnson, W. R.)—**126**, 352
Carruthers, P. Resonance in phonon-phonon scattering—**125**, 123
—— Thermal conductivity of solids. III. Modification of three-phonon processes by isotopic scattering—**126**, 1448
—— **and How-sen Wong.** Photoproduction of pion pairs near threshold—**128**, 2382
Carver, J. H., D. C. Peaslee, and R. B. Taylor. Nuclear $E1$ overtones—**127**, 2198
Case, K. M. and S. G. Gasiorowicz. Can massless particles be charged?—**125**, 1055
—— (see Aamodt, R.)—**126**, 1165
Caspari, M. E., S. Frankel, and G. T. Wood. Magnetic hyperfine interaction and electronic relaxation in rare earth ions in EuIG—**127**, 1519
Catura, Richard C. and J. Reginald Richardson. New isotope In^{108}—**126**, 646
Cazzola, P. (see Andreassi, G.)—**128**, 1425
Cence, Robert J. and Charles N. Waddell. Search for H^6—**128**, 1788
Chadwick, G. B., G. B. Collins, P. J. Duke, T. Fujii, N. C. Hien, M. A. R. Kemp, and F. Turkot. Inelastic proton-proton scattering at 1.3, 2.1, and 2.9 BeV—**128**, 1823
—— (see Fujii, T.)—**128**, 1836
Chamberlain, O., K. M. Crowe, D. Keefe, L. T. Kerth, A. Lemonick, Tin Maung, and T. F. Zipf. Measurement of total cross sections of K^- mesons in H and D in momentum region 630 MeV/c to 1100 MeV/c—**125**, 1696
—— (see Elioff, Tommy)—**128**, 869
Chambers, R. P. (see Spencer, E. G.)—**125**, 1950
Chan, Yau Wa, W. Bruce Ewbank, William A. Nierenberg, and Howard A. Shugart. Nuclear spin of 9.5-h Au^{196m}—**127**, 572
Chandrasekhar, B. S. (see Rayne, J. A.)—**125**, 1952
Chang, G. K. and R. E. Jones. Low-temperature thermal conductivity of amorphous solids—**126**, 2055
—— (see Toxen, A. M.)—**126**, 919
Chanin, L. M., A. V. Phelps, and M. A. Biondi. Measurements of attachment of low-energy electrons to O_2 molecules—**128**, 219
Charap, John M. and Euan J. Squires. Factorization of residues of Regge poles—**127**, 1387
Charap, S. H. Critical concentrations in magnetism—**126**, 1393
Chase, C. E. Thermal conduction in liquid He II. I. Temperature dependence—**127**, 361
Chase, L. F., Jr., R. G. Johnson, R. J. Vaughn, and E. K. Warburton. Endothermic deuteron stripping reactions. III. $C^{14}(d,p_\gamma)C^{15}$ and $Li^7(d,p_\gamma)Li^8$ reactions—**127**, 859
Chaudhry, R., R. Vandenbosch, and J. R. Huizenga. Fission fragment angular distributions and saddle deformations—**126**, 220
—— (see Huizenga, J. R.)—**126**, 210
Chen, C. L. and M. Raether. Collision cross section of slow electrons and ions with Cs atoms—**128**, 2679
Chen, Mao-Chao. Effect of π-K interaction on nucleon form factors; processes $\pi\pi \to KK$ and $\pi\pi \to \pi\pi$—**125**, 2125
—— Trident production cross section and quantum electrodynamics at small distances—**127**, 1844
Cheng, C. H., K. P. Gupta, E. C. van Reuth, and Paul A. Beck. Low-temperature specific heat of bcc Ti-V alloys—**126**, 2030
—— (see Lounasmaa, O. V.)—**128**, 2153
—— (see Starke, E. A., Jr.)—**126**, 1746
Cheng, Hung. Meromorphic property of S matrix in complex plane of angular momentum—**127**, 647
Chern, Bernard (see Tubis, Arnold)—**128**, 1352
Chew, Geoffrey F., Steven C. Frautschi, and Stanley Mandelstam. Regge poles in π-π scattering—**126**, 1202
Child, H. R. (see Cable, J. W.)—**128**, 2118
Chipman, David R. (see Batterman, Boris W.)—**127**, 690
Chisholm, A. (see Allaby, J. V.)—**125**, 2077
Choppin, Gregory R. (see Morton, John R., III)—**128**, 265
Choyke, W. J. and Lyle Patrick. Exciton recombination radiation and phonon spectrum of 6H SiC—**127**, 1868
Chrien, R. E., H. H. Bolotin, and H. Palevsky. Resonance capture γ rays from Pt—**127**, 1680
——, **A. P. Jain, and H. Palevsky.** Anomalous neutron scattering of Ar^{36}—**125**, 275
Chynoweth, A. G., R. A. Logan, and D. E. Thomas. Phonon-assisted tunnelling in Si and Ge Esaki junctions—**125**, 877
—— (see Logan, R. A.)—**128**, 2518
Cirillo, F. N. (see Watanabe, Takeshi)—**127**, 2055
Clark, Clifton Bob. Calculated lattice specific heats for seven bcc elements—**125**, 1898
Clarke, G. R. (see London, H.)—**128**, 1992
Clayton, Donald D. Energy levels of N^{14} from $N^{15}(He^3,\alpha)N^{14}$—**128**, 2254

Clement, C. F. Effect of nuclear electric field on elastic scattering of deuterons—**128**, 2728
—— Electric polarizability of deuteron—**128**, 2724
Clementi, E., C. C. J. Roothaan, and M. Yoshimine. Accurate analytical self-consistent field functions for atoms. II. Lowest configurations of neutral first row atoms—**127**, 1618
Clikeman, F. M., A. J. Bureau, and M. G. Stewart. Photoproton reaction in Be^9—**126**, 1822
Clinton, William L. Volume dependence of energy of enclosed quantum mechanical system—**128**, 2837
Clogston, A. M. Impurity states in metals—**125**, 439
——, **B. T. Matthias, M. Peter, H. J. Williams, E. Corenzwit, and R. C. Sherwood.** Local magnetic moment associated with Fe atom dissolved in various transition metal alloys—**125**, 541
Cobble, J. W. (see Brandhorst, Henry W., Jr.)—**125**, 1323
Cocconi, G., A. N. Diddens, E. Lillethun, G. Manning, A. E. Taylor, T. G. Walker, and A. M. Wetherell. High-energy proton scattering from carbon and deuterium—**126**, 277
Cochran, D. R. F. and J. D. Knight. Excitation functions of some reactions of 6- to 24-MeV He^3 ions with C and Al—**128**, 1281
—— (see Frauenfelder, H.)—**126**, 1065
—— (see Nagle, D. E.)—**125**, 490
Cochran, E. L. (see Jen, C. K.)—**126**, 1749
Cochran, L. W. and D. W. Forester. Diffusion of slow electrons in gases—**126**, 1785
Cody, G. D. (see Abeles, B.)—**125**, 44
Cohen, B. G. (see Logan, R. A.)—**128**, 2518
Cohen, Bernard L. Neutron-proton interaction between states of same l in nuclear shell model—**127**, 597
—— Nuclear structure studies in the Zr region with stripping reactions—**125**, 1358
——, **R. H. Fulmer, and A. L. McCarthy.** Location of single-particle levels in medium mass nuclei—**126**, 698
——, **P. Mukherjee, R. H. Fulmer, and A. L. McCarthy.** Spin-orbit splittings in nuclear shell model—**127**, 1678
—— (see Fulmer, R. H.)—**128**, 1302
—— (see Jolly, R. K.)—**128**, 2292
—— (see Mead, James B.)—**125**, 947
—— (see Mukherjee, Paresh)—**127**, 1284
Cohen, Marshall H. Radiation in plasma. II. Equivalent sources—**126**, 389
—— Radiation in plasma. III. Metal boundaries—**126**, 398
Cohen, Marvin L. Electron-phonon self-energies in many-valley semiconductors—**128**, 131
Cohen, V. W., T. Moran, and S. Penselin. Hfs of Cs^{134m}—**127**, 517
—— (see Penselin, S.)—**127**, 524
Cole, G. H. A. Scattering of small wavelength neutrons by gas of hard spheres—**126**, 383
Cole, R. K. (see Bodansky, D.)—**126**, 1082
Coleman, Sidney and Richard E. Norton. Runaway modes in model field theories—**125**, 1422
Colley, D., N. Gelfand, U. Nauenberg, J. Steinberger, S. Wolf, H. R. Brugger, P. R. Kramer, and R. J. Plano. Resonances in strange-particle production—**128**, 1930
Collings, E. W. and F. T. Hedgcock. Low-temperature magnetic properties of dilute Mg-Mn, Al-Mn, Mg-Fe, and Al-Fe alloys—**126**, 1654
Collins, G. B. (see Chadwick, G. B.)—**128**, 1823
—— (see Fujii, T.)—**128**, 1836
Compaan, K. and H. Zijlstra. Effective-field approach to problem of interacting polarized particles—**126**, 1722
Compton, V. B. (see Matthias, B. T.)—**128**, 588
Connor, Donald and Tung Tsang. Sign of Li^8 magnetic moment—**126**, 1506
Conway, D. C. (see Santos Ocampo, A. G.)—**128**, 258
Conwell, E. M. Diffusion of excess carriers in many-valley band structure—**127**, 1493
Cook, L. F., Jr., and B. W. Lee. π-N scattering with inelastic contributions—**127**, 297
——, **and B. W. Lee.** Unitarity and production amplitudes—**127**, 283
—— (see Blankenbecler, R.)—**128**, 2440
Cool, R. L., E. W. Jenkins, T. F. Kycia, D. A. Hill, L. Marshall, and R. A. Schluter. Measurement of magnetic moment of Λ^0 hyperon—**127**, 2223
Coon, S. A. (see Berkowitz, E.)—**128**, 247
Cooper, B. R., R. J. Elliott, S. J. Nettel, and H. Suhl. Theory of magnetic resonance in heavy rare-earth metals—**127**, 57
—— **and F. Keffer.** Paramagnetic resonance width in Fe and Ni—**125**, 896
Cooper, John W. Photoionization from outer atomic subshells. A model study—**128**, 681
—— **and Jerry B. Martin.** Electron photodetachment from ions and elastic collision cross sections for O, C, Cl, and F—**126**, 1482
Coren, Richard L. and Hellmut J. Juretschke. Magnetoresistance and domain structure in thin Ni films—**126**, 1378
Corenzwit, E. (see Clogston, A. M.)—**125**, 541
—— (see Matthias, B. T.)—**128**, 588
Cork, B. (see Beall, E. F.)—**126**, 1554
Corliss, L. M. (see Hastings, J. M.)—**126**, 556
Corman, E. Gary. Optical-model analysis of high-energy neutrons scattered by deformed nuclei—**125**, 359
Cornwall, John M. and Malvin A. Ruderman. Mandelstam representation and Regge poles with absorptive energy-dependent potentials—**128**, 1474
Coryell, Charles D. (see Pierson, William R.)—**127**, 1708
Costello, D. G. (see Walters, W. L.)—**125**, 2012
Costikas, A. and L. I. Grossweiner. Photoequilibrium between KCl F and F' centers at 80°K—**126**, 1410
Cox, D. E. (see Shirane, G.)—**125**, 1158
Coyne, J. (see Spencer, L. V.)—**128**, 2230
Craig, P. P. (see Nagle, D. E.)—**125**, 490
Cranberg, L. (see Thomson, D. B.)—**125**, 2049
Crane, L. T. Specific heats of dilute Au-Co alloys between 1.2 and 5°K—**125**, 1902
—— (see Zimmerman, J. E.)—**126**, 513
Crawford, D. F. and H. Messel. Energy distribution in low-energy electron-photon showers in lead absorbers—**128**, 2352
Crawford, Frank S., Jr., Fernand Grard, and Gerald A. Smith. Production of Σ^+K^+ by (π^+,p) interaction at 1170 MeV/c—**128**, 368
Crawford, J. H., Jr. (see Curtis, O. L., Jr.)—**126**, 1342
Croissiaux, M. Electron-proton coincidences in inelastic electron-deuteron scattering—**127**, 613
Cross, W. G. (see Bodansky, D.)—**126**, 1082
Crowe, K. M. (see Chamberlain, O.)—**125**, 1696
Crowell, C. R., W. G. Spitzer, L. E. Howarth, and E. E. LaBate. Attenuation length measurements of hot electrons in metal films—**127**, 2006
Csavinszky, P. Treatment of ionized impurity scattering in degenerate semiconductors. Application of variational technique in partial wave method—**126**, 1436
Csejthey-Barth, M. (see Jones, B. D.)—**127**, 236
Cuevas, J. (see Allison, S. K.)—**127**, 792
Čujec, Bibijana. Investigation of d-s shell nuclei with (d,He^3) reactions—**128**, 2303
Culshaw, W., J. Kannelaud, and F. Lopez. Zeeman effects in He-Ne planar laser—**128**, 1747
Cumming, J. B., G. Friedlander, J. Hudis, and A. M. Poskanzer. Spallation of Al by 28-GeV protons—**127**, 950
——, **G. Friedlander, and S. Katcoff.** $C^{12}(p,pn)C^{11}$ cross section at 28 Gev—**125**, 2078
——, **J. Hudis, A. M. Poskanzer, and S. Kaufman.** $Al^{27}(p,3pn)$-$Na^{24}/C^{12}(p,pn)C^{11}$ cross-section ratio in GeV region—**128**, 2392
Cummings, Fred W. (see Callaway, Joseph)—**126**, 5

Cunningham, R. W. (see Beattie, Alan R.)—**125**, 533
Curl, R. F., Jr., Robert F. Heidelberg, and James L. Kinsey. Microwave spectrum of ClO_2. II. Analysis of hfs and spectrum of $Cl^{35}O^{16}O^{18}$—**125**, 1993
Curran, R. K. Formation of NO_2^- by charge transfer at very low energies—**125**, 910
Currin, James D. Theory of exchange relaxation of hfs in electron spin resonance—**126**, 1995
Curtis, O. L., Jr., and J. H. Crawford, Jr. Radiation-induced recombination and trapping centers in Ge. II. Annealing in γ-irradiated, Sb- and As-doped material—**126**, 1342
Cusachs, Louis Chopin. Dependence of induction and dispersion energies at finite internuclear distances—**125**, 561
Cutkosky, R. E. Wave functions—**125**, 745

Daehnick, W. W. (see Schrank, G.)—**127**, 2159
Dahlquist, John A. Back diffusion of electrons in N_2, H_2, and Ar—**128**, 1988
Damask, A. C. and G. J. Dienes. Kinetics of vacancy-interstitial annihilation. I. Impurity-interstitial trapping—**125**, 444
—— (see Dienes, G. J.)—**125**, 447; **128**, 2542
Damon, D. H. and A. N. Gerritsen. Magnetic susceptibility of weakly interacting donors in Ge—**127**, 405
Dangle, R. (see Salisbury, S. R.)—**126**, 2143
Daniel, H., O. Mehling, O. Müller, and K. S. Subudhi. β-γ circulation-polarization correlation in decay of Mn^{52}—**128**, 261
Darewych, G. (see Neamtan, S. M.)—**126**, 193
Darnell, F. J. (see Gillson, J. L., Jr.)—**125**, 149
Darovskikh, V. F. (see Goritchev, P. A.)—**126**, 2196
Das, T. P. and Dick, B. G. Nuclear quadrupole interactions in alkali halide solid solutions—**127**, 1063
—— **and M. Pomerantz.** Nuclear quadrupole interaction in pure metals—**125**, 2208(E)
—— (see Dick, B. G.)—**127**, 1053
—— (see Khubchandani, P. G.)—**126**, 594
Das Gupta, K. Characteristic modified x-ray scattering—**128**, 2181
Dash, W. C. (see Philipp, H. R.)—**127**, 762
Datars, W. R. Electron spin resonance in antimony—**126**, 975
Davidson, C. W. and W. E. J. Farvis. Microwave studies of pulsed glow discharge—**127**, 1854
Davis, D. H., R. Levi Setti, M. Raymund, and G. Tomasini. Probable example of decay $\Sigma^0 \to \Lambda + e^+ + e^-$ in nuclear emulsion—**127**, 605
—— (see Jones, B. D.)—**127**, 236
Davis, H. T. (see Meyer, L.)—**126**, 1927
Davis, R. H. (see Nelson, J. W.)—**125**, 2005
Day, G. F. (see Streever, R. L.)—**128**, 1632
Deahl, K. J. (see McIlwain, R. L.)—**127**, 239
DeCelles, Paul C. (see Bég, Mirza A. Baqi)—**128**, 386
—— (see Durand, Loyal, III)—**126**, 1882
DeFord, John W. (see Bauer, Walter)—**128**, 1497
Dehmelt, H. G. and K. B. Jefferts. Alignment of H_2^+ molecular ion by selective photodissociation. I—**125**, 1318
DeJuren, J. A., R. W. Stooksberry, and M. Wallis. Measurement of $O^{16}(n,p)N^{16}$ cross section from 11 to 19 MeV—**127**, 1229
Del Bianco, W. E. and W. E. Stephens. Photonuclear activation by 20.5-MeV γ rays—**126**, 709
Demanins, F., G. Pisent, G. Poiani, and C. Villi. Scattering of neutrons by α particles—**125**, 318
deMars, G. A. (see Rimai, L.)—**127**, 702
de Moraes, R. J. (see Gross, Bernhard)—**126**, 930
de Rafael, Eduardo. $\Sigma^0 - \Lambda^0$ relative parity from $\Lambda^0 \to \Sigma^0$ conversion induced by Coulomb field of nucleus—**128**, 2435
de Swart, J. J. and C. K. Iddings. A-nucleon scattering and pion-hyperon coupling constants—**128**, 2810
des Cloizeaux, Jacques and J. J. Pearson. Spin wave spectrum of antiferromagnetic linear chain—**128**, 2131
Dennery, Philippe. Pion production in π-N collisions—**127**, 664
Denton, R. T. (see Spencer, E. G.)—**125**, 1950
der Mateosian, E. and M. L. Sehgal. Isomeric transition in Sb^{122}—**125**, 1615
Dermit, G. Alternant orbitals in crystals—**127**, 1110
Derrick, M. (see McIlwain, R. L.)—**127**, 239
Detraz, Claude (see Radvanyi, Pierre)—**125**, 295
Deutch, B. I. Measurement of magnetic moment of 279-keV state in Tl^{203} using resonance fluorescence—**126**, 1168
Deutsch, M. (see Bauer, R. W.)—**128**, 751
Devare, S. H. (see Sharma, R. P.)—**125**, 2071
Devlin, Thomas J., Burton J. Moyer, and Victor Perez-Mendez. $\pi^{\pm}$-p total cross sections in range 450 to 1650 MeV—**125**, 690
De Wames, R. E. (see Lehman, G. W.)—**128**, 1593
Dewdney, John W. Energy distributions of photoelectrons from metals due to surface effect—**125**, 399
DeWitt, Bryce S. Quantum theory without electromagnetic potentials—**125**, 2189
Dexter, D. L. Cooperative optical absorption in solids—**126**, 1962
——(see Fowler, W. Beall)—**128**, 2154
Dick, B. G. and T. P. Das. Lattice deformations in alkali halide solid solutions—**127**, 1053
—— (see Das, T. P.)—**127**, 1063
Dicke, R. H. Lee-Yang vector field and isotropy of universe—**126**, 1580
—— Long-range scalar interaction—**126**, 1875
—— Mach's principle and invariance under transformation of units—**125**, 2163
—— (see Peebles, P. J.)—**127**, 629; **128**, 2006
Dickinson, W. C., L. Passell, and O. Halpern. Studies of optics of neutrons. I. Measurement of neutron-proton coherent scattering amplitude by mirror reflection—**126**, 632
Diddens, A. N. (see Cocconi, G.)—**126**, 277
Diefendorf, R. J. (see Klein, C. A.)—**125**, 468
Dienes, G. J. and A. C. Damask. Kinetics of vacancy-interstitial annihilation. II. Di-interstitial formation—**125**, 447
—— **and A. C. Damask.** Kinetics of vacancy-interstitial annihilation. III. Interstitial migration to sinks—**128**, 2542
—— (see Damask, A. C.)—**125**, 444
Dillon, J. F., Jr. Ferrimagnetic resonance in rare-earth-doped YIG. III. Linewidth—**127**, 1495
——, **and L. R. Walker.** Ferrimagnetic resonance in rare-earth doped YIG. II. Tb substitution—**126**, 2261(E)
Dimmock, J. O. and R. G. Wheeler. Symmetry properties of wave functions in magnetic crystals—**127**, 391
—— (see Wheeler, R. G.)—**125**, 1805
Dismukes, J. P. (see Abeles, B.)—**125**, 44
Dodge, W. R. and W. C. Barber. Photoprotons from O, F, Ne, and other light elements—**127**, 1746
Dohnanyi, J. S. Nuclear magnetic relaxation in presence of paramagnetic ions—**125**, 1824
—— Nuclear magnetic relaxation in presence of paramagnetic ions. II—**127**, 1980
Dolling, G. and B. N. Brockhouse. Lattice vibrations in pyrolitic graphite—**128**, 1120
Domb, C. and M. F. Sykes. Effect of change of spin on critical properties of Ising and Heisenberg models—**128**, 168
Dombey, Norman. Weak pion production—**127**, 653
Donaghy, J. J. (see Stewart, A. T.)—**128**, 118
Donahue, D. J. Neutron inelastic scattering from some collective nuclear states—**128**, 1231
Donath, Wilm E. (see Mattis, Daniel)—**128**, 1618

Donnelly, R. J. (see Meyer, L.)—126, 1927
Donovan, Russell E. and Arthur A. Vuylsteke. Paramagnetic resonance spectrum of Mg in $CdWO_4$—127, 76
Dorenbusch, W. E. (see Browne, C. P.)—125, 992
Dorn, David W. Mike results—implications for spontaneous fission—126, 693
Douglass, D. H., Jr., and R. H. Blumberg. Precise critical-field measurements of superconducting Sn films in London limit—127, 2038
Dowell, J. T. (see Schulz, G. J.)—128, 174
Downs, B. W. and R. Schrils. Possibility of $[\boldsymbol{\sigma}(1)-\boldsymbol{\sigma}(2)]\cdot\mathbf{L}$ term in hyperon-nucleon interactions—127, 1388
Doyama, M. and J. S. Koehler. Quenching and annealing of lattice vacancies in pure Ag—127, 21
Doyle, William T. Electron-nuclear double resonance studies of color centers—126, 1421
Drachman, Richard J. Ground-state energy of nucleon—125, 1758
Dransfeld, K. Ultrasonic absorption in liquid He at temperatures below 0.6°K—127, 17
Dreeben, Arthur B. (see Bube, Richard H.)—128, 532
Dreesen, James A. Effect of order on Hall constants of Ni_3Mn—125, 1215
Dreitlein, J. and H. Primakoff. Possible neutrinoless decay modes of muon—126, 375
—— **and H. Primakoff.** Properties of Σ decays and Σ^0 lifetime—125, 1671
Drell, S. D. and R. H. Pratt. Extrapolation to cuts and scattering of electrons and positrons—125, 1394
Dresselhaus, G. Ferro- and antiferromagnetism in cubic cluster of spins—126, 1664
—— Ferro- and antiferromagnestism in simple cubic lattice—127, 1137
—— **and M. S. Dresselhaus.** Interband transitions in superconductors—125, 1212
—— (see Dresselhaus, M. S.)—125, 499
Dresselhaus, M. S. and G. Dresselhaus. Interband transitions for metals in magnetic field—125, 499
—— (see Dresselhaus, G.)—125, 1212
Dreyfus, R. W. and A. S. Nowick. Ionic conductivity of doped NaCl crystals—126, 1367
Drisko, R. M. (see Austern, N.)—128, 733
—— (see Bassel, R. H.)—128, 2693
Dropesky, B. J. (see Bunker, M. E.)—127, 844
Dropkin, J. J. (see Goldstein, B.)—126, 966
DuBois, D. F. and M. G. Kivelson. Quasi-classical theory of electron correlations in atoms—127, 1182
Ducuing, J. (see Armstrong, J. A.)—127, 1918
Duke, C. B. (see Nodvik, J. S.)—125, 975
Duke, P. J. (see Chadwick, G. B.)—128, 1823
—— (see Fujii, T.)—128, 1836
Dulaney, Harry, C. H. Braden, and L. D. Wyly. Interpretation of experiments on β decay of Eu^{152}—125, 1620
Dumke, W. P. Interband transitions and maser action—127, 1559
—— **and R. R. Haering.** Ultrasonic amplification in semimetals—126, 1974
Duncan, Robert C., Jr., and Bruce Rosenblum. Theory of cyclotron resonance absorption by negative-mass holes in Ge—125, 484
Dunn, Gordon H., Ronald Geballe, and Donavon Pretzer. Production of Lyman α radiation in ion-atom collisions—128, 2200
Durand, Loyal, III. Pionic contributions to magnetic moment of muon—128, 441
—— Remarks on electromagnetic interactions of massless particles—128, 434
——, **Paul C. DeCelles, and Robert B. Marr.** Lorentz invariance and kinematic structure of vertex functions—126, 1882
Dwight, K. (see Lyons, D. H.)—126, 540
—— (see Menyuk, N.)—127, 1983
Dyal, Palmer and John P. Hummel. Cross sections for $B^{11}(\gamma,\pi^-)C^{11}$ and $B^{11}(\gamma,\pi^+)Be^{11}$—127, 2217

Eades, J. (see Allaby, J. V.)—125, 2077
Easterling, Vernon J. and Henry V. Bohm. Magnetoacoustic measurements in Ag at 230 Mc/sec and 42°K—125, 812
—— (see Bohm, Henry V.)—128, 1021
Edge, R. D. and G. A. Peterson. Nuclear excitation by 180° electron scattering—128, 2750
Edwards, E. (see Primak, W.)—128, 2580
Egelstaff, P. A. (see Turberfield, K. C.)—127, 1017
Ehlers, V. J., W. A. Nierenberg, and H. A. Shugart. Nuclear spin of Ga^{70}—125, 2008
—— **and Howard A. Shugart.** Hfs separations and nuclear moments of Ga^{68}—127, 529
Ehrenreich, H. and H. R. Philipp. Optical properties of Ag and Cu—128, 1622
—— (see Philipp, H. R.)—127, 762
Eichler, E. (see Robinson, R. L.)—128, 252
Eidson, W. W. and R. D. Bent. Gamma decay of 7.57-MeV level of N^{15}—127, 913
—— **and R. D. Bent.** Study of reaction $Ne^{20}(\alpha,\alpha'\gamma)Ne^{20}$—128, 1312
—— (see Bent, R. D.)—127, 2188
Eisner, M. (see Kattawar, G. W.)—126, 1054
Eklund, K. E. (see Nessin, M.)—125, 639
Eldridge, H. B. (see Ritchie, R. H.)—126, 1935
Elioff, Tommy, Louis Agnew, Owen Chamberlain, Herbert M. Steiner, Clyde Wiegand, and Tom Ypsilantis. Antiproton-nucleon cross sections from 0.5 to 1.0 BeV—128, 869
Elliott, R. J. (see Cooper, B. R.)—127, 57
Elmgren, J. A. and D. E. Hudson. Imperfection photoconductivity in diamond—128, 1044
Elwyn, A. J., R. O. Lane, and A. Langsdorf, Jr. Polarization and differential cross sections in n-d scattering—128, 779
—— (see Lane, R. O.)—126, 1105
Ely, R. P. (see Camerini, U.)—128, 362
Enge, H. A. (see Erskine, J. R.)—128, 720
Engelkemeir, D. W., K. F. Flynn, and L. E. Glendenin. Positron emission in decay of K^{40}—126, 1818
Engelsberg, Stanley. Energy losses and collective excitations in crystal—126, 1262
—— Functional derivative techniques in theory of superconductivity—126, 1251
Englander, Paula (see Perel, Julius)—128, 1148
Engler, G. (see Burde, J.)—128, 325
Erskine, J. R., W. W. Buechner, and H. A. Enge. $Bi^{209}(d,p)Bi^{210}$ reaction at low bombarding energies and with high resolution—128, 720
—— (see Browne, C. P.)—125, 992
Eswaran, M. A. (see Varma, J.)—125, 656; 127, 1197
Euthymiou, P. and P. Axel. Photoproduction of 100-μsec isomer and tentative assignment to Hg^{201}—128, 274
Everett, Allen E. Corrections to impulse approximation in scattering from deuterons—126, 831
—— Pion-hyperon resonances and possible nonconservation of isotopic spin—127, 1402
Everett, Glen E. Cyclotron resonance measurements in Bi—128, 2564
Everhart, Edgar (see Lockwood, Grant J.)—125, 567
—— (see Morgan, Gerry H.)—128, 667
Evtuhov, Viktor. Valence bands of Ge and Si in external magnetic field—125, 1869
Ewbank, W. Bruce (see Chan, Yau Wa)—127, 572
Eyges, Leonard. New method for calculating molecular orbitals with application to cyclic systems—128, 1715
—— Solution of Schrödinger equation for a periodic lattice. II—126, 93
Ezratty, J. (see Solomon, I.)—127, 78

Fabri, E. (see Barsella, B.)—126, 1561; 128, 451
Facetti, J., E. Trabal, R. McClin, and S. Torres. A new isotope, Pt^{201}—127, 1690
Fairbank, Henry A. (see Strongin, Myron)—128, 1983
Fairbank, W. M. (see Kidder, J. N.)—127, 987
Fairhall, A. W. (see Hower, Charles O.)—128, 1163
Fajans, Jack (see Neidhardt, W. Jim)—128, 495
Fan, H. Y. (see Nisenoff, M.)—128, 1605
Fang, P. H., C. R. Robbins, and Bengt Aurivillius. Ferroelectricity in compound $Bi_4Ti_3O_{12}$—126, 892
—— (see Aurivillius, Bengt)—126, 893
Farvis, W. E. J. (see Davidson, C. W.)—127, 1858
Fatuzzo, Ennio. Theoretical considerations on switching transient in ferroelectrics—127, 1999
——, **G. Harbeke, W. J. Merz, R. Nitsche, H. Roetschi, and W. Ruppel.** Ferroelectricity in SbSi—127, 2036
——, **R. Nitsche, H. Roetschi, and S. Zingg.** New ferroelectrics of TTM family—125, 514
Faulkner, J. S. Constructing spin Hamiltonian for N-electron system—128, 202
Fawcett, E. Magnetoresistance of Mo and W—128, 154
Fazio, G. G. (see Melissinos, A. C.)—128, 2373
Feenberg, Eugene (see Wu, Fa Yueh)—128, 943
Fein, A. E. (see Maradudin, A. A.)—128, 2589
Feinberg, G. Conservation of hypercharge—125, 728
—— **and F. Gürsey.** Approximate symmetries in two-neutrino theory—128, 378
—— (see Bernstein, J.)—125, 1741
Fenton, David G. and Arnold Russek. Diatomic molecular orbitals for small internuclear separations—127, 1212
Ferguson, Eldon E. Calculation of cross sections for zero activation energy processes by simple collision models with emphasis on Penning effect—128, 210
—— (see Benton, E. E.)—128, 206
Ferguson, Robert L. (see Wahl, Arthur C.)—126, 1112
Ferreira, Emma Perez. Pion production in pion-nucleon collisions and pion-pion interaction—125, 676
Ferziger, J. H. and A. Leonard. Multiple scattering of neutrons in static approximation—128, 2188
Fetkovich, J. G. (see McIlwain, R. L.)—127, 239
Feuchtwang, T. E. Electron-nuclear double resonance spectrum of F-center electron in alkali halides (with NaCl structure)—126, 1628
—— Hyperfine interaction constants of F-center electron with lattice in alkali halides (with NaCl structure)—126, 1616
Feynman, R. P., R. W. Hellwarth, C. K. Iddings, and P. M. Platzman. Mobility of slow electrons in polar crystal—127, 1004
Fichtel, C. E. (see Biswas, S.)—128, 2756
Fickinger, W. J., E. Pickup, D. K. Robinson, and E. O. Salant. p-p interactions at 2 BeV. I. Single pion production—125, 2082
Fickler, S. I. (see Arnowitt, R. L.)—127, 1821
Fiebiger, N. F., W. R. Kane, and R. E. Segel. Thermal neutron capture γ rays in Fe—125, 2031
—— (see Kane, W. R.)—125, 2037
Field, G. (see Razavy, M.)—125, 269
Fields, T. H. (see McIlwain, R. L.)—127, 239
Fink, R. W. (see Bramlitt, E. T.)—125, 297
Finkelstein, David (see Schmidt, George)—126, 1611
Finlay, Roger W. and George E. Owen. Angular distribution for $F^{19}(d,n)Ne^{20}$ reaction—128, 2309
Finzi, Arrigo. Test of possible variations of gravitational constant by observation of white dwarfs within galactic clusters—128, 2012
Fiorentini, A. (see Bisi, A.)—128, 2195
Fisher, J. C. Particle-hole inversion in Fermi surface: symmetry operation for collective excitations—125, 492
Fitch, V. L., S. L. Meyer, and P. A. Piroué. Particle production at large angles by 30- and 33-BeV protons—126, 1849
Fivel, Daniel I. New formulation of dispersion relations for potential scattering—125, 1085
Flamm, D. and P. G. O. Freund. Parity nonconservation induced by universal Fermi interactions into pion-nucleon vertex—125, 385
Flicker, H., J. J. Loferski, and J. Scott-Monck. Radiation defect introduction rates in n- and p-type Si in vicinity of radiation damage threshold—128, 2557
Flinchbaugh, David E. (see Russek, Arnold)—126, 573
Flinn, P. A. (see Maradudin, A. A.)—126, 9; 126, 2059
Flores, Jorge Merlo. Excitation function of $Al^{27}(d,p)Al^{28}$ reaction between 2.2 and 12.6 MeV—127, 1246
Flower, M. and N. H. March. Transitions to metallic states in ionic crystals, with particular reference to CsI—125, 1144
Flynn, C. P. Linde's law and scattering power of associated point defects—126, 533
—— Vacancies and complexes in noble metals—125, 881
Flynn, E. R. and P. J. Bendt. n-p differential scattering cross section at 22.5 MeV—128, 1268
Flynn, K. F. (see Engelkemeir, D. W.)—126, 1818
Foldy, Leslie L. Charged boson gas—125, 2208(E)
—— (see Rose, M. E.)—128, 1776
Folen, V. J. "Forbidden" transitions in paramagnetic resonance of Mn^{++} in Al_2O_3—125, 1581
Foner, S. N. (see Jen, C. K.)—126, 1749
Fontana, Peter R. Spin-orbit and spin-spin interactions in diatomic molecules. I. Fine structure of H_2—125, 220
—— Theory of long-range interatomic forces. III. First-order interaction energies in coupled representation—125, 1597
Forbes, Fred F. (see Hobbie, Russell K.)—126, 2137
Forester, D. W. (see Cochran, L. W.)—126, 1785
Forman, R. Space-charge limited current relations in high-pressure gas diodes—125, 2208(E)
—— Theory of negative resistance characteristics in irradiated gas thermionic diodes—128, 1487
——, **J. A. Ghormley, and J. R. Reiss.** Electrical conduction through radiation-produced plasmas in inert gas thermionic diodes—128, 1493
Forrester, P. A. and C. F. Hempstead. Paramagnetic resonance of Tb^{3+} ions in $CaWO_4$ and CaF_2—126, 923
Forsen, H. K. (see Ware, A. A.)—125, 417
Fowler, A. B., W. E. Howard, and G. E. Brock. Optical properties of heavily doped compensated Ge—128, 1664
Fowler, H. A. (see Marton, L.)—126, 182
Fowler, J. L. and E. C. Campbell. Total neutron cross section of Pb^{208}—127, 2192
Fowler, Richard G. and James D. Hood, Jr. Very fast dynamical wave phenomenon—128, 991
—— (see Paxton, G. W.)—128, 993
Fowler, W. A. (see Bardin, R. K.)—127, 583
Fowler, W. Beall and D. L. Dexter. Relation between absorption and emission probabilities in luminescent centers in ionic solids—128, 2154
Fox, J. D. (see Kane, W. R.)—125, 2037
Fox, Raymond. Measurement of nuclear transitions with 10^{-10}-sec half-lives and scattering cross sections of unstable particles by proximity scattering—125, 311
—— **and Norman F. Ramsey.** Low-energy proton production by 160-MeV protons—125, 1609
Frank, A. L., E. T. Arakawa, and R. D. Birkhoff. Optical emission from irradiated foils. II—126, 1947
Frankel, S. (see Caspari, M. E.)—127, 1519
Frankl, D. R. Surface states due to Cu on Ge—128, 2609
Frantz, J. (see Hulubei, H.)—126, 2174
Franzak, E. and M. Bailyn. Multiphonon processes occurring in first-order perturbation theory—126, 2033
Franzini, Paolo (see Bardon, Marcel)—126, 1826
Fraser, Peter A. (see Smith, Kenneth)—125, 553

Frati, W. and J. Rainwater. μ-mesonic atom studies of Ti, Fe, Cu, Zn, Tl, Pb, and Bi—**128**, 2360
Frauenfelder, H., D. E. Nagle, R. D. Taylor, D. R. F. Cochran, and W. M. Visscher. Elliptical polarization of Fe^{57} γ rays—**126**, 1065
Frautschi, Steven C., M. Gell-Mann, and F. Zachariasen. Experimental consequences of hypothesis of Regge poles—**126**, 2204
—— (see Chew, Geoffrey F.)—**126**, 1202
Frazer, B. C. and P. J. Brown. Antiferromagnetic structure of $CrVO_4$ and anhydrous sulfates of divalent Fe, Ni, and Co—**125**, 1283
Frazer, William R. and David Y. Wong. Width of three-pion resonances—**128**, 1927
—— (see Ball, J. S.)—**128**, 478
Fredkin, D. R. and G. H. Wannier. Theory of electron tunneling in semiconductor junctions—**128**, 2054
—— (see Wannier, G. H.)—**125**, 1910
Freeman, A. J., R. K. Nesbet, and R. E. Watson. Two-electron Heisenberg exchange interaction between neighboring atoms—**125**, 1978
—— **and R. E. Watson.** Theoretical investigation of some magnetic and spectroscopic properties of rare-earth ions—**127**, 2058
Frei, E. H. (see Aharoni, A.)—**127**, 439
Freund, P. G. O. (see Flamm, D.)—**125**, 385
Frey, Donald A. and Masataka Mizushima. Hfs of H_2 in its metastable $^3\Pi_u$ state—**128**, 2683
Fried, David L. and L. Sartori. Magnetic moment of Lee particle—**128**, 2879
Friedel, J. (see Asdente, M.)—**126**, 2261(E)
Friedländer, E. M. Peripheral collisions at accelerator energies and π-π resonance—**127**, 247
Friedlander, G. (see Cumming, J. B.)—**125**, 2078; **127**, 950
Frisch, H. L., J. M. Hammersley, and D. J. A. Welsh. Monte Carlo estimates of percolation probabilities for various lattices—**126**, 949
Fritze, K. and T. J. Kennett. Decay measurements of Ba^{141} and Ba^{142}—**127**, 1262
Fritzsche, H. Effect of stress on donor wave functions in Ge—**125**, 1560
—— Effect of uniaxial compression on impurity conduction in n-type Ge—**125**, 1552
Fronsdal, Christian and Kalyana Mahanthappa. Integral representation for scattering amplitude with complex singularities—**127**, 1847
Frost, L. S. and A. V. Phelps. Rotational excitation and momentum transfer cross sections for electrons in H_2 and N_2 from transport coefficients—**127**, 1621
Fry, Richard K. and A. B. Cardwell. Photoelectric properties of natural U and changes occurring at crystallographic transformations—**125**, 471
Fry, W. F. (see Camerini, U.)—**128**, 362
Fujii, T., G. B. Chadwick, G. B. Collins, P. J. Duke, N. C. Hien, M. A. R. Kemp, and F. Turkot. Elastic proton-proton scattering at 1.35, 2.1, and 2.9 BeV—**128**, 1836
—— (see Chadwick, G. B.)—**128**, 1823
Fujita, Jun-Ichi. Conserved current hypothesis and β decay of RaE—**126**, 202
Fujiwara, H. (see Tatsumoto, E.)—**128**, 2179
Fuller, Robert W. Dependence of neutron production in fission on rate of change of nuclear potential—**126**, 684
—— **and John A. Wheeler.** Causality and multiply connected space-time—**128**, 919
Fulmer, Clyde B. Elastic scattering of protons by single isotopes—**125**, 631
—— (see Goodman, C. D.)—**127**, 574
Fulmer, R. H., A. L. McCarthy, and B. L. Cohen. Nuclear structure studies in 82-neutron region with stripping reactions—**128**, 1302
—— (see Cohen, B. L.)—**126**, 698; **127**, 1678
Fultz, S. C., R. L. Bramblett, J. T. Caldwell, N. E. Hansen, and C. P. Jupiter. Photoneutron cross sections for V^{51} and Co^{59}—**128**, 2345
——, **R. L. Bramblett, J. T. Caldwell, and N. A. Kerr.** Photoneutron cross-section measurements on Au using nearly monochromatic photons—**127**, 1273
Funk, E. G., Jr. (see Schwerdtfeger, C. F.)—**125**, 1641
Funsten, H. O. (see Warburton, E. K.)—**128**, 1810
Furlan, G. (see Andreassi, G.)—**128**, 1425

Gabathuler, E. (see Lewis, G. M.)—**125**, 378
Gabbard, F. and B. D. Kern. Cross sections for charged particle reactions induced in medium weight nuclei by neutrons in energy range 12–18 MeV—**128**, 1276
Gaidos, J. A. (see Camerini, U.)—**128**, 362
Gall, C. D. (see Kenney, V. P.)—**126**, 736
Gallagher, C. J., Jr. Coupling of angular momenta in two-particle states in deformed even-even nuclei—**126**, 1525
——, **and H. L. Nielsen.** Decay of 2.1-h Ta^{178}—**126**, 1520
Galt, J. K. and E. G. Spencer. Loss mechanisms in spinel ferrites—**127**, 1572
Gammel, J. L. (see Baker, George A., Jr.)—**125**, 1754
Garcia-Munoz, M. (see Allison, S. K.)—**127**, 792
Gardner, C. C. and J. D. Anderson. γ yield from proton bombardment of T—**125**, 626
Gardner, D. G. (see Bramlitt, E. T.)—**125**, 297
Garland, C. W. and J. Silverman. Elastic constants of Cd from 4.2°K to 300°K—**127**, 2287(E)
Garrison, J. C. (see Belinfante, F. J.)—**125**, 1124
Gärtner, W. W., C. Loscoe, and H. Mette. Photomagnetothermal effect in semiconductors—**126**, 1680
Gasiorowicz, S. G. (see Case, K. M.)—**125**, 1055
Gates, Duane C., Robert W. Kenney, and William P. Swanson. Electron triplet production by high-energy photons in H—**125**, 1310
Gatland, I. R. (see Bransden, B. H.)—**128**, 859
Gatti, E. (see Bisi, A.)—**128**, 2195
Gayley, R. I., Jr., E. A. Lynton, and B. Serin. Specific heats of Sn alloys and their relation to superconducting transition temperature—**126**, 43
Gazis, D. C. (see Wallis, R. F.)—**128**, 106
Geballe, Ronald (see Dunn, Gordon H.)—**128**, 2200
Geballe, T. H. (see Matthias, B. T.)—**128**, 588
Geffen, Donald A. Decay rates of neutral mesons—**128**, 374
—— Reaction, $\pi^- + p \rightarrow e^+ + e^- + n$, as means of measuring electromagnetic form factor of charged pion—**125**, 1745
Gelfand, N. (see Colley, D.)—**128**, 1930
Gell-Mann, Murray. Symmetries of baryons and mesons—**125**, 1067
—— (see Frautschi, S. C.)—**126**, 2204
Genin, Jeannine (see Radvanyi, Pierre)—**125**, 295
Gerber, H. J. (see Jones, R. S.)—**128**, 1357
Gerhart, J. B. (see Lieber, A. J.)—**126**, 1496
Gerjuoy, Edward and Nicholas A. Krall. Dispersion relations for electron scattering from atomic He—**127**, 2105
Gerritsen, A. N. (see Damon, D. H.)—**127**, 405
Gerritsen, Hendrik J. and Edward S. Sabisky. Paramagnetic resonance of Ni^{3+} and Ni^{3+} in TiO_2—**125**, 1853
Gersch, H. A. and T. H. Berlin. Spherical lattice gas—**127**, 2276
Geschwind, S., P. Kisliuk, M. P. Klein, J. P. Remeika, and D. L. Wood. Sharp-line fluorescence, electron paramagnetic resonance, and thermoluminescence of Mn^{4+} in α-Al_2O_3—**126**, 1684
Ghiorso, A. (see Perlman, I.)—**127**, 917
Ghormley, J. A. (see Forman, R.)—**128**, 1493
Ghosh, S. N. and S. P. Khare. Secondary electron emission from metal surface by high-energy Fe and neutral atom bombardments—**125**, 1254

Giaever, I., H. R. Hart, Jr., and K. Megerle. Tunneling into superconductors at temperatures below 1°K—**126**, 941
Giamati, C. C. and F. Reines. Experiment test of conservation of nucleons—**126**, 2178
Gibbs, W. R. (see Tobocman, W.)—**126**, 1076
Gielisse, Peter J. (see Plendl, Johannes N.)—**125**, 828
Gilbert, Walter (see Boulware, David G.)—**126**, 1563
Gilliam, O. R. (see Wylie, D. W.)—**125**, 451
Gillson, J. L., Jr., and F. J. Darnell. Electroluminescence in ZnS—**125**, 149
Gilmore, John, Stanley G. Thompson, and I. Perlman. Investigation of influence of angular momentum on fission probability—**128**, 2276
Giorgi, A. L., E. G. Szklarz, E. K. Storms, Allen L. Bowman, and B. T. Matthias. Effect of composition on superconducting transition temperature of Ta carbide and Nb carbide—**125**, 837
Girardeau, M. Ground state of charged Bose gas—**127**, 1809
Girifalco, L. A. Semiempirical approach to theory of thermal diffusion in crystals—**128**, 2630
Gittleman, J. I. and S. Bozowski. Some aspects of Kapitza resistance—**128**, 646
Givens, M. Parker (see Milgram, A.)—**125**, 1506
Glashow, S. L. (see Baker, M.)—**128**, 2462
Glendenin, L. E. (see Engelkemeir, D. W.)—**126**, 1818
Glendenning, Norman K. Note on isomeric state of Po^{212}—**127**, 923
—— **and Gustav Kramer.** Nucleon-nucleon triplet-even potentials—**126**, 2159
Gobeli, G. W. and F. G. Allen. Direct and indirect excitation processes in photoelectric emission from Si—**127**, 141
—— (see Allen, F. G.)—**127**, 150
Goebel, Charles J. (see Sakita, Bunji)—**127**, 1787
Goedecke, G. H. and E. Brown. Variational principle for potential scattering—**125**, 2116
Goishi, W. (see Bonner, N. A.)—**127**, 217
Goldberg, E. (see Kerlee, D. D.)—**127**, 1224
Goldberg, Joshua N. (see Havas, Peter)—**128**, 398
Goldberger, Marvin L. and Kenneth M. Watson. Concerning notion of "time interval" in *S*-matrix theory—**127**, 2284
—— (see Blankenbecler, R.)—**126**, 766; **128**, 2440
Goldburg, Walter I. Static spin temperature experiments and approach to thermal equilibrium in rotating reference frame—**128**, 1554
Goldemberg, J. (see Moscati, G.)—**126**, 1098
Goldenberg, H. Mark (see Kleppner, Daniel)—**126**, 603
Goldhammer, Paul. Doublet splitting in $1p$ shell due to tensor interaction—**125**, 660
—— **and Henry S. Valk.** Photodisintegration of He—**127**, 945; **128**, 2925(E)
Goldring, G., H. M. Loebenstein, and R. Barloutaud. Branching ratios and magnetic dipole transition probabilities in odd-A rotational nuclei—**127**, 2151
—— **and Z. Vager.** Gyromagnetic ratios of 2^+ states in even W isotopes—**127**, 929
—— (**see Birk, M.**)—**126**, 426
Goldstein, Bernard and J. J. Dropkin. Infrared sensitivity of ZnS:Cu:Co phosphor—**126**, 966
—— (see Almeleh, Nissim)—**128**, 1568
Goldstein, Louis. Thermal excitations in solid He^4—**128**, 1520
—— **and R. L. Mills.** Anomalous liquid-solid transformation of He^3—**128**, 2479
Goldstone, Jeffrey, Abdus Salam, and Steven Weinberg. Broken symmetries—**127**, 965
Gonda, Shun-ichi. (see Mikoshiba, Nobuo)—**127**, 1954
González, L., A. Trier, and J. J. van Loef. Excitation function of reaction $Ti^{47}(n,p)Sc^{47}$ at neutron energies between 2.2 and 3.6 MeV—**126**, 271
Good, R. H., Jr. Classical equations of motion for polarized particle in electromagnetic field—**125**, 2112
Goodings, D. A. Magnitude of exchange interactions in Gd—**127**, 1532
Goodman, Bernard (see Bassani, Franco)—**127**, 1969
Goodman, C. D., J. B. Ball, and C. B. Fulmer. Single-particle neutron bound states in Fe isotopes and in Co studied with (p,d) reactions—**127**, 574
Gordon, Glen E. (see Thomas, T. Darrah)—**126**, 1805
Gordon, Robert B. (see Bauer, Charles L.)—**126**, 73
Gordon, W. L. (see Joseph, A. S.)—**126**, 489
Gordy, Walter (see Rexroad, Harvey N.)—**125**, 242
—— (see Rusk, James R.)—**127**, 817
Goritchev, P. A., V. F. Darovskikh, O. V. Lozhkin, A. I. Obukhov, N. A. Perfilov, and U. P. Jakovlev. Investigation of light fragmentation products and peculiarities of nuclear fission at high energies of incident particles—**126**, 2196
Gorman, David (see Montgomery, David)—**126**, 2261(E)
Gossard, A. C., V. Jaccarino, and J. H. Wernick. Nuclear magnetic resonance in UAl_2—**128**, 1038
Gotow, Kazuo, Frederick Lobkowicz, and Ernst Heer. Depolarization parameter in proton-proton scattering at 213 MeV—**127**, 2206
—— **and Susumu Okubo.** Possible tests of TCP theorem in proton-antiproton scattering—**128**, 1921
Graft, R. D. (see Aukerman, L. W.)—**127**, 1576
Grant, R. W. (see Shirley, D. A.)—**127**, 2097
Granzow, K. D. and G. W. McClure. High-voltage glow discharges in D_2 gas. III. Starting potential theory—**125**, 1792
—— (see McClure, G. W.)—**125**, 3
Grard, Fernand and Gerald A. Smith. Study of reaction $\pi^+ + p - \Sigma^+ + K^+$ near threshold—**127**, 607
—— (see Crawford, Frank S., Jr.)—**128**, 368
Graziano, William and Stanley G. Wojcicki. $K^- p$ interactions at 1.15 BeV/c—**128**, 1868
Green, Ben A., Jr. Size effect in electrical resistivity of alloys—**126**, 1402
Green, J. A. and W. C. Parkinson. Polarization of protons in $Be^9(d,p)Be^{10}$—**127**, 926
Greenaway, D. L. (see Cardona, Manuel)—**125**, 1291
Gregory, Christopher. Einstein, Infeld, and Hoffmann problem of motion in five space—**125**, 2136
Greider, K. R. Nuclear single-particle wave functions—**127**, 1672
Greisen, K. (see Pak, W.)—**125**, 1668
Griem, Hans R. High-density corrections in plasma spectroscopy—**128**, 997
—— Stark broadening of isolated spectral lines from heavy elements in plasma—**128**, 515
——, **M. Baranger, A. C. Kolb, and G. Oertel.** Stark broadening of neutral He lines in plasma—**125**, 177
—— **and C. S. Shen.** Application of dispersion relation to electron impact widths and shifts of isolated spectral lines from neutral atoms—**125**, 196
—— (see Berg, H. F.)—**125**, 199
Griffin, Henry C. (see Pierson, William R.)—**127**, 1708
Griffin, James J. Fission fragment angular distributions by exact power series—**127**, 1248
Griffing, George W. Influence of interference scattering on scattering of slow neutrons by gaseous methane—**127**, 1179
Griffy, T. A., D. S. Onley, J. T. Reynolds, and L. C. Biedenharn. Partial-wave analysis of inelastic scattering of electrons by nuclei. I. Results for quadrupole excitations—**128**, 833
Grodzins, L. (see Bauer, R. W.)—**128**, 694
Gross, Bernhard and R. J. de Moraes. γ irradiation effects on electrets—**126**, 930
Grossweiner, L. I. (see Costikas, A.)—**126**, 1410
Grover, J. Robb. Effects of angular momentum and γ-ray emission on excitation functions—**127**, 2142
—— Nuclear reactions of Ta with 5.7-GeV protons—**126**, 1540
Gruhn, C. R. (see Bodansky, D.)—**126**, 1082

Guenther, R. A. (see Lounasmaa, O. V.)—**126**, 1357
Guernsey, Ralph L. Kinetic theory of quantum plasmas—**127**, 1446
Gunnink, Ray and A. W. Stoner. Decay studies of even-even isotopes, Er^{172} and Dy^{166}—**126**, 642
Günther, Marian. Relativistic Lee model—**125**, 1061; **126**, 2261(E)
Gupta, K. P. (see Cheng, C. H.)—**126**, 2030
Gupta, Rajendra (see Joshi, S. K.)—**126**, 933
Gupta, Suraj N. (see Anderson, Robert L.)—**127**, 1377
Gürsey, F. (see Feinberg, G.)—**128**, 378
Guss, D. E. (see Biswas, S.)—**128**, 2756
Guth, Eugene. New class of classical uncertainty relations giving uncertainty for long and certainty for short times—**126**, 1213
Gutsche, G. D., H. D. Holmgren, L. M. Cameron, and R. L. Johnston. Differential cross sections for tritium-induced reactions on C^{12}—**125**, 648
Guttman, L. (see Abrahams, S. C.)—**127**, 2052
Gutzwiller, Martin C. Fermion ensembles of maximum entropy—**125**, 1455

Haas, C. Infrared absorption in heavily doped n-type Ge—**125**, 1965
Hadjioannou, Fokion T. Coherent photoproduction of π^0 from deuterium—**125**, 1414
Haering, R. R. (see Dumke, W. P.)—**126**, 1974
—— (see Miller, P. B.)—**128**, 126
Hahn, E. L. (see Hartmann, S. R.)—**128**, 2042
Hahn, R. L. and J. M. Miller. Reactions of α particles with Sn^{124}—**125**, 2208(E)
Hahn, Yukap, Thomas F. O'Malley, and Larry Spruch. Static approximation and bounds on single-channel phase shifts—**128**, 932
Haines, Eldon L. (see Sikkeland, Torbjørn)—**125**, 1350
Hake, R. R., D. H. Leslie, and T. G. Berlincourt. Low-temperature resistivity minima and negative magnetoresistivities in some dilute superconducting Ti alloys—**127**, 170
—— (see Berlincourt, T. G.)—**127**, 710
Halford, Donald. Electron-nuclear double resonance, nuclear moments, and $\langle r^{-3} \rangle$ of Nd^{143} (III) and Nd^{145} (III) in $LaCl_3$—**127**, 1940
Hall, J. L. and R. T. Schumacher. Electron spin resonance of H atoms in CaF_2—**127**, 1892
—— (see Schumacher, R. T.)—**125**, 428
Hall, John J. Large-strain dependence of acceptor binding energy in Ge—**128**, 68
Hall, W. S. (see Miller, D. W.)—**125**, 2054
Halpern, Francis R. Acnodes for pion-nucleon scattering—**125**, 1768
—— Singularities of five-point functions in perturbation theory—**127**, 1819
Halpern, I. (see Bodansky, D.)—**126**, 1082
Halpern, O. (see Dickinson, W. C.)—**126**, 632
Ham, Frank S. Energy bands of alkali metals. I. Calculated bands—**128**, 82; II. Fermi surface—**128**, 2524
Hamburger, E. W. and L. H. Reber. Study of $K^{39}(d,d')$ reaction—**128**, 333
Hamilton, J., P. Menotti, G. C. Oades, and L. L. J. Vick. Pion-nucleon scattering and pion-pion interactions—**128**, 1881
Hammersley, J. M. (see Frisch, H. L.)—**126**, 949
Hand, G. L. and M. A. Levine. New approach to force-free magnetic fields—**127**, 1856
Handler, Paul. Surface conductivity of cleaved Si surfaces—**126**, 971
Handley, T. H. (see Harmatz, B.)—**128**, 1186
Handy, Robert M. Electrode effects on Al_2O_3 tunnel junctions—**126**, 1968
Hanna, J. (see St. Romain, F. A.)—**126**, 1794
Hanna, S. S. (see Preston, R. S.)—**128**, 2207
Hansen, Luisa F. and Richard D. Albert. Statistical theory predictions for 5- to 11-MeV (p,n) and (p,p') nuclear reactions in V^{51}, Co^{59}, Cu^{63}, Cu^{65}, and Rh^{103}—**128**, 291
Hansen, N. E. (see Fultz, S. C.)—**128**, 2345
Hanson, A. O. (see Jones, R. S.)—**128**, 1357
Hanton, J. P. (see Valstyn, E. P.)—**128**, 2078
Harbeke, G. (see Fatuzzo, E.)—**127**, 2036
Hardie, G. (see Salisbury, S. R.)—**126**, 2143
Harkness, A. Lee (see Horrocks, Donald L.)—**125**, 1619
Harman, T. C. (see Wright, G. B.)—**125**, 1534
Harmatz, B., T. H. Handley, and J. W. Mihelich. Properties of nuclear levels in number of odd-A nuclei ($151 \leqslant A \leqslant 191$)—**128**, 1186
Harmer, D. S. (see Hooper, J. W.)—**125**, 2000
Harrick, N. J. Optical spectrum of semiconductor surface states from frustrated total internal reflections—**125**, 1165
Harrington, David R. Intermediate meson contributions to hyperon decays—**125**, 2208(E)
—— Two-particle approximation for three-pion amplitude—**127**, 2235
Harris, A. Brooks and Horst Meyer. Calorimetric determination of energy levels in rare-earth and yttrium-iron garnets—**127**, 101
Harris, Gale I. and L. W. Seagondollar. Properties of excited states of P^{31}. I. γ-ray spectra—**128**, 338
—— (see Rangan, L. K.)—**127**, 2180
Harris, Gilda M. Attractive two-body interactions in partially ionized plasmas—**125**, 1131
Harrison, Ralph J. and Paul L. Sagalyn. Trace relations for tensors relating electric fields and elastic strains to nuclear quadrupole effects—**128**, 1630
Harrison, Walter A. Band structure and Fermi surface of Zn—**126**, 497
Hart, E. L., R. J. Louttit, D. Luers, T. W. Morris, W. J. Willis, and S. S. Yamamoto. Multiple meson production in proton-proton collisions at 2.85 BeV—**126**, 747
Hart, H. R., Jr. (see Giaever, I.)—**126**, 941
Hartke, J. L. Drift mobilities of electrons and holes and space-charge-limited currents in amorphous Se films—**125**, 1177
Hartman, E. L. Energy dependence of indirect optical absorption in semiconductors—**127**, 765
Hartmann, S. R. and E. L. Hahn. Nuclear double resonance in rotating frame—**128**, 2042
—— (see Anderson, A. G.)—**128**, 2023
Harvey, Bernard G. (see Morton, John R., III)—**126**, 1798; **128**, 265
Hassler, F. L. and R. A. Peck, Jr. Neutron-induced reactions in third and fourth shell nuclei—**125**, 1011
Hastings, J. M. and L. M. Corliss. Magnetic structure of $MnCr_2O_4$—**126**, 556
Hatsukade, Shigeo and Howard J. Schnitzer. Resonance model for photoproduction of K mesons on nucleons—**128**, 468
Haus, H. A. and J. A. Mullen. Quantum noise in linear amplifiers—**128**, 2407
Hauser, J. J. and E. Buehler. Effect of plastic deformation and annealing temperature on superconducting properties—**125**, 142
—— **and E. Helfand.** Critical field of thin superconducting shapes—**127**, 386
Havas, Peter and Joshua N. Goldberg. Lorentz-invariant equations of motion of point masses in general theory of relativity—**128**, 398
—— (see Krizan, John E.)—**128**, 2916
Hearn, A. C. and E. Leader. Fixed-angle dispersion relations for nucleon Compton scattering. I—**126**, 789
Heath, R. L. (see Reich, C. W.)—**127**, 192
Hebel, L. C., Jr. Impurities and nuclear spin relaxation in Al—**128**, 21

Heberle, J. (see Preston, R. S.)—128, 2207
Hedgcock, F. T. (see Collings, E. W.)—126, 1654
Heer, Ernst (see Kazuo, Gotow)—127, 2206
Heidelberg, Robert F. (see Curl, R. F., Jr.)—125, 1993
Heikes, R. R. (see Takei, W. J.)—125, 1893
Heine, V. (see Austin, B. J.)—127, 276
Helfand, E. (see Hauser, J. J.)—127, 386
Heller, G. S. (see Stickler, J. J.)—127, 1077
Hellwarth, R. W. and P. M. Platzman. Magnetization of slow electrons in polar crystal—128, 1599
—— (see Feynman, R. P.)—127, 1004
Helmy, E., M. A. Melkanoff, D. J. Prowse, and D. H. Stork. Optical model analysis of 260-MeV K^+-meson elastic scattering—127, 254
Heltemes, E. C. and C. A. Swenson. Heat capacity of solid He^3—128, 1512
Hemkar, M. P. (see Joshi, S. K.)—126, 1687
Hempstead, C. F. (see Forrester, P. A.)—126, 923
Henkel, R. L. (see Smith, H. L.)—125, 1329
Henley, E. M. and B. A. Jacobsohn. Decay of heavy bosons—128, 1394
—— **and B. A. Jacobsohn.** Suggested quantum numbers for bosons of mass $\approx 4m_e$—127, 1829
Herb, R. G. (see Walters, W. L.)—125, 2012
Hewitt, R. R. and T. T. Taylor. Nuclear quadrupole resonance and electric field gradient in metallic In—125, 524
Hicks, H. G., H. B. Levy, W. E. Nervik, P. C. Stevenson, J. B. Niday, and J. C. Armstrong, Jr. Further radiochemical studies of fission of U^{238*} compound nucleus—128, 700
Hien, N. C. (see Chadwick, G. B.)—128, 1823
—— (see Fujii, T.)—128, 1836
Hiida, K. Charge structure of nucleon—127, 2231
Hill, B. J. (see Baker, George A., Jr.)—125, 1754
Hill, D. A. (see Cool, R. L.)—127, 2223
Hill, R. M. and S. K. Ichiki. Polarization relaxation in triglycine sulfate above Curie temperature—128, 1140
Hincks, E. P. (see Johnson, C. Scott)—125, 2102
Hinds, G. (see Weber, J.)—128, 2413
Hines, Arthella P. and John S. Ross. Isotope shift in spectrum of Os—126, 2105
Hinnov, E. and Joseph G. Hirschberg. Electron-ion recombination in dense plasmas—125, 795
Hinrichs, C. Keith, Burton J. Moyer, John A. Poirier, and Philip M. Ogden. Charge-exchange production of antineutrons and their annihilation in H—127, 617
Hirschberg, Joseph G. (see Hinnov, E.)—125, 795
Hirshfeld, A. T., H. A. Leupold, and H. A. Boorse. Superconducting and normal specific heats of Nb—127, 1501
Hobbie, Russell K. and Fred F. Forbes. Differential cross sections for reactions $C^{12}(Li^6,\alpha)N^{14}$ and $C^{12}(Li^7,\alpha)N^{15}$—126, 2137
—— (see Blair, J. M.)—128, 2282
Hoekstra, P. and D. R. Behrendt. Energies of two interstitial configurations in fcc crystal—128, 560
Hoffman, R. A., J. Lefrancois, E. H. Thorndike, and Richard Wilson. n-p triple scattering parameters R and A—125, 973
Hofmann, J. Anton (see Sagalyn, Paul L.)—127, 68
Hogg, B. G. (see Naqvi, S. I. H.)—128, 357
Hogg, W. R. (see Lewis, G. M.)—125, 378
Hohenemser, C. (see Yaqub, M.)—127, 2028
Holcomb, D. F. (see Ohlsen, W. D.)—126, 1953
Holland, M. G. and William Paul. Effect of pressure on energy levels of impurities in semiconductors. I. As, In, and Al in Si—128, 30
—— **and William Paul.** Effect of pressure on energy levels of impurities in semiconductors. III. Au in Ge—128, 43
Holloway, W. W., Jr., E. Lüscher, and R. Novick. Hfs of atomic N—126, 2109
Holmgren, H. D. (see Gutsche, G. D.)—125, 648
Holton, W. C. and H. Blum. Paramagnetic resonance of F centers in alkali halides—125, 89
Hone, Daniel. Transport properties of liquid He^3—125, 1494
Hood, James D., Jr. (see Fowler, Richard G.)—128, 991
Hoogenboom, A. M., E. Kashy, and W. W. Buechner. Stripping analysis of (d,p) angular distributions from $Cl^{35}(d,p)Cl^{36}$ and $Cl^{37}(d,p)Cl^{38}$ reactions—128, 305
—— (see Brenner, M. W.)—127, 947
Hooper, J. W., D. S. Harmer, D. W. Martin, and E. W. McDaniel. Comparison of electron and proton ionization data with Born approximation predictions—125, 2000
Hooton, D. J. Optical-model analysis of energy dependence of neutron polarization near 1 MeV—128, 1805
Hopfield, J. J. (see Thomas, D. G.)—128, 2135
Horrocks, Donald L. and A. Lee Harkness. Half-life of Ni^{63}—125, 1619
Howard, W. E. (see Fowler, A. B.)—128, 1664
Howarth, L. E. (see Crowell, C. R.)—127, 2006
—— (see Kaiser, W.)—127, 1950
—— (see Spitzer, W. G.)—126, 1710
Howe, D. A., L. M. Langer, E. H. Spejewski, and D. E. Wortman. β spectrum of Mn^{56}—128, 2748
Hower, Charles O. and A. W. Fairhall. Ranges of Be^9 ions in Au and Al—128, 1163
Hsu, F. S. L. (see Kunzler, J. E.)—128, 1084
Huang, Kerson. Method to measure lifetime of Σ^0 hyperon—128, 2793
Hubbard, Paul S. Nuclear magnetic resonance and relaxation of four spin molecules in liquid—128, 650
Huberman, M. N. Partial ionic stopping power and energy expended in electron capture and loss collisions of protons in hydrogen gas. II—127, 799
Hudis, J. (see Cumming, J. B.)—127, 950; 128, 2392
Hudson, Cecil I., Jr., W. Scott Walker, and S. Berko. Differential elastic scattering of 15.2-MeV neutrons by Ta, Bi, Th, and U—128, 1271
Hudson, D. E. (see Elmgren, J. A.)—128, 1044
Hudspeth, Emmett L. (see Nelson, John W.)—125, 301
Hughes, A. James (see Callaway, Joseph)—128, 134
Hughes, Floyd and James G. Allard. Electron paramagnetic resonance in irradiated CsCl—125, 173
Huizenga, J. R., R. Chaudhry, and R. Vandenbosch. He-ion-induced fission of Bi, Pb, Tl, and Au—126, 210
—— (see Chaudhry, R.)—126, 220
—— (see Vandenbosch, R.)—127, 212
—— (see Wing, J.)—128, 280
Hull, A. W. Cathode spot—126, 1603
Hull, G. W., Jr. (see Matthias, B. T.)—128, 588
Hull, M. H., Jr., K. E. Lassila, H. M. Ruppel, F. A. McDonald, and G. Breit. Phase-parameter representation of neutron-proton scattering from 13.7 to 350 MeV. II—128, 830
—— (see Breit, G.)—128, 826
—— (see Lassila, K. E.)—126, 881
Hulm, J. K. (see Blaugher, R. D.)—125, 474
Hultsch, R. A. and R. G. Barnes. Pressure dependence of self-diffusion in Li and Na—125, 1832
Hulubei, H., N. Martalogu, J. Frantz, M. Ivaşcu, N. Scintei, A. Berinde, and I. Neamu. $S^{32}(p,p'\gamma)$ angular correlations from 5.7 to 6.34 MeV—126, 2174
Hummel, John P. (see Dyal, Palmer)—127, 2217
Humphrey, William E. and Ronald R. Ross. Low-energy interactions of K^- mesons in H—127, 1305
Huschilt, John (see Anderson, Robert L.)—127, 1377
Hutchin, W. H. (see Bonner, N. A.)—127, 217
Huzita, H. (see Camerini, U.)—128, 362
Hyman, Lloyd G. Scattering of photons by protons—125, 1768

Ibers, James A. and J. D. Swalen. Paramagnetic resonance line shapes and magnetic parameters of polycrystalline substances—127, 1914

Ichiki, S. K. (see Hill, R. M.)—**128**, 1140
Iddings, C. K. (see de Swart, J. J.)—**128**, 2810
—— (see Feynman, R. P.)—**127**, 1004
Iddings, G. M. (see Bonner, N. A.)—**127**, 217
Iizuka, Jugoro and Reinhard Oehme. Model of pionic hyperon decay—**126**, 787
Ilakovac, K., L. G. Kuo, M. Petravić, I. Šlaus, P. Tomas, and G. R. Satchler. Reaction $V^{51}(n,d)Ti^{50}$ at 14.4 MeV—**128**, 2739
Imhof, W. L., R. G. Johnson, F. J. Vaughn, and M. Walt. Cross sections for $B^{11}(n,\gamma)B^{12}$ reaction—**125**, 1334
Ingalls, R. Variational calculation of Sternheimer factors for ferrous ion—**128**, 1155
Inglis, D. R. Heavy-particle stripping and structure of N^{14}—**126**, 1789
Irvine, John W., Jr. (see Bowen, Lawrence H.)—**127**, 1698
Ishiguro, K. (see Sasaki, T.)—**127**, 1091
Iso, C. (see Barshay, S.)—**125**, 2168
Isoya, A. and M. J. Marrone. Polarization of protons from deuteron stripping reactions with zero orbital angular momentum transfer—**128**, 800
——, **S. Micheletti, and L. Reber.** Polarization of protons from deuteron stripping reactions with $l=1$ orbital angular momentum transfer—**128**, 806
Ivaşcu, M. (see Hulubei, H.)—**126**, 2174
Ivash, Eugene V. Conversion-electron angular correlations for stripping reactions—**125**, 1337
—— (see Smith, William R.)—**128**, 1175
Iwamoto, Fumiaki and Katuro Sawada. Stability of plane wave Hartree-Fock ground state—**126**, 887
Iyengar, K. V. K. and R. A. Peck, Jr. Elastic scattering of polarized 2.8-MeV neutrons—**125**, 1000

Jaccarino, V. (see Gossard, A. C.)—**128**, 1038
Jackson, H. E. Direct observation of resonant p-wave neutron capture—**127**, 1687
—— **and J. E. Lynn.** Resonant absorption of neutrons by crystals—**127**, 461
Jacobs, P. W. M. and H. A. Papazian. Photochemical behavior of alkali halide crystals containing OH^- and $SO_4^=$ ions—**127**, 1567
Jacobsohn, B. A. (see Henley, E. M.)—**127**, 1829; **128**, 1394
Jaffe, A. M. and Y. S. Kim. Complex angular momentum in two-channel problems—**127**, 2261
Jahn, Helmut. Pion-nucleon processes above first maximum according to strong-coupling method—**126**, 824
Jain, A. L. and S. H. Koenig. Electrons and holes in Bi—**127**, 442
Jain, A. P. (see Chrien, R. E.)—**125**, 275
Jain, P. L. Nucleon-nucleon interactions at energies greater than 10^{12} eV—**125**, 679
Jakovlev, U. P. (see Goritchev, P. A.)—**126**, 2196
Jansen, Laurens. Systematic analysis of many-body interactions in molecular solids—**125**, 1798
Jayaraman, A. (see Kennedy, G. C.)—**126**, 1363
Jefferts, K. B. (see Dehmelt, H. G.)—**125**, 1318
Jeffries, C. D. (see Ruby, R. H.)—**127**, 51
—— (see Scott, P. L.)—**127**, 32
Jen, C. K., V. A. Bowers, E. L. Cochran, and S. N. Foner. Electron spin resonance of alkali atoms in inert-gas matrices—**126**, 1749
Jenkins, E. W. (see Cool, R. L.)—**127**, 2223
Jepsen, D. W. and R. F. Wallis. Effect of quartic anharmonicity on infrared absorption of alkali halide crystals—**125**, 1496
Jha, S., R. Segnan, and G. Lang. Recoilless nuclear resonant absorption in I^{129}—**128**, 1160
Joenk, R. J. Magnetic field dependence of thermodynamic properties of antiferromagnets; adiabatic magnetization—**128**, 1634
—— Theory of exchange resonance in antiferromagnetic $CuCl_2 \cdot 2H_2O$—**126**, 565; **127**, 2287(E)
John, Walter and John M. Prosser. Photodisintegration cross section of Be near threshold—**127**, 231
Johnson, C. E., W. Marshall, and G. J. Perlow. Electric quadrupole moment of 14.4-keV state of Fe^{57}—**126**, 1503
Johnson, C. M. P. (see Beall, E. F.)—**126**, 1554
Johnson, C. Scott, E. P. Hincks, and H. L. Anderson. μ-mesonic x rays in Fe region—**125**, 2102
Johnson, L. F., G. D. Boyd, K. Nassau, and R. R. Soden. Continuous operation of solid-state optical maser—**126**, 1406
Johnson, Noah R. (see Robinson, R. L.)—**128**, 252
Johnson, P. D. (see Segall, B.)—**128**, 76
Johnson, R. A. and E. Brown. Point defects in Cu—**127**, 446
Johnson, R. G. (see Chase, L. F., Jr.)—**127**, 859
—— (see Imhof, W. L.)—**125**, 1334
Johnson, W. R., C. O. Carroll, and C. J. Mullin. Radiati—corrections to Coulomb scattering asymmetry functionve **126**, 352
—— **and J. D. Rozics.** Bremsstrahlung from polarized electrons—**128**, 192
Johnston, R. L. (see Gutsche, G. D.)—**125**, 648
Johnston, W. H. (see Wolf, Clarence J.)—**125**, 307
Jolly, R. K., E. K. Lin, and B. L. Cohen. Studies of 15-MeV inelastic deuteron scattering—**128**, 2292
Jones, B. D., B. Sanjeevaiah, J. Zakrzewski, M. Csejthey-Barth, J. B. Lagnaux, J. Sacton, M. J. Beniston, E. H. S. Burhop, and D. H. Davis. Production of hyperfragments from interactions of 800-MeV/c K^- mesons with emulsion nuclei—**127**, 236
Jones, Lawrence W. (see Peck, C. Clyde)—**126**, 1836
Jones, R. E. (see Chang, G. K.)—**126**, 2055
—— (see Toxen, A. M.)—**126**, 919
Jones, R. S., H. J. Gerber, A. O. Hanson, and A. Wattenberg. Deuteron Compton effect—**128**, 1357
Jones, W. M. (see Rout, V. M.)—**128**, 263
Jones, William H., Jr., and Frederick J. Milford. Knight shift and quadrupole interaction in Tc metal—**125**, 1259
Jopson, R. C., Hans Mark, and C. D. Swift. L-shell fluorescence yields of Pt, Tl, and Pb—**128**, 2671
——, **Hans Mark, and C. D. Swift.** Production of characteristic x rays by low-energy protons—**127**, 1612
Joseph, A. S. and W. L. Gordon. Low-field de Haas-van Alphen effect in Zn—**126**, 489
Joseph, D. W. Coordinate covariance and particle spectrum—**126**, 319
Joshi, S. K. and Rajendra Gupta. Dispersion of phonons in AgCl—**126**, 933
—— **and M. P. Hemkar.** Vibrational spectrum of Na—**126**, 1687
—— **and B. M. S. Kashyap.** Electrical and thermal resistivities and Fermi surface of monovalent metals—**126**, 936
Joyner, W. T. Reaction mechanism in $Mg^{24}(p,p'\gamma)$ at low energies—**128**, 2261
Judd, B. R. Low-lying levels in certain actinide atoms—**125**, 613
—— Optical absorption intensities of rare earth ions—**127**, 750
——, **C. A. Lovejoy, and D. A. Shirley.** Anomalous quadrupole coupling in Eu ethylsulfate—**128**, 1733
Jupiter, C. P. (see Fultz, S. C.)—**128**, 2345
Juretschke, Hellmut J. (see Coren, Richard L.)—**126**, 1378

Kaiser, R. H. (see Kaiser, W.)—**127**, 1950
Kaiser, W., W. G. Spitzer, R. H. Kaiser, and L. E. Howarth. Infrared properties of CaF_2, SrF_2, and BaF_2—**127**, 1950
—— (see Wood, D. L.)—**126**, 2079
Kalbfleisch, George R. Two-parameter statistical model—**127**, 971

—— (see Button, Janice)—126, 1858
Kalos, M. H. Monte Carlo calculations of ground state of three- and four-body nuclei—128, 1791
Kamimura, Hiroshi. Anisotropic spin-orbit coupling of d^3 and d^8 solutes in corundum—128, 1077
Kaminsky, Manfred. Sputtering experiments in Rutherford collision region—126, 1267
Kammer, E. W. (see Smith, R. J.)—127, 179
Kanazawa, A. (see Sugawara, M.)—126, 2251
Kane, Evan O. Spectral moments and continuum perturbation theory—125, 1094
—— Theory of photoelectric emission from semiconductors—127, 131
Kane, J. V. (see Lowe, J.)—126, 1811
Kane, W. E. (see Walters, W. L.)—125, 2012
Kane, W. R., N. F. Fiebiger, and J. D. Fox. Coincidence studies of thermal neutron capture γ rays of Cr—125, 2037
—— (see Fiebiger, N. F.)—125, 2031
Kang, Ik-Ju and Laurie M. Brown. Higher Born approximation for Coulomb scattering of spinless particle—128, 2828
Kannelaud, J. (see Culshaw, W.)—128, 1747
Kanter, H. and E. J. Sternglass. Interpretation of range measurements for kV electrons in solids—126, 620
Kaplan, Harvey. Effect of impurity layer on surface waves—125, 1271
—— Remarks on force constant models for lattice dynamics—125, 1905
Kaplan, M. (see Shirley, D. A.)—127, 2097
Kaplan, T. A. (see Lyons, D. H.)—126, 540
—— (see Menyuk, N.)—127, 1983
Karayianis, N., C. A. Morrison, and D. E. Wortman. Long-range order of linear antiferromagnetic chain—126, 1443
Karlovsky, Jaroslav. Simple method for calculating tunneling current of Esaki diode—127, 419
Karzas, W. J. and R. Latter. Electromagnetic radiation from nuclear explosion in space—126, 1919
Kashy, E. (see Brenner, M. W.)—127, 947
—— (see Hoogenboom, A. M.)—128, 305
Kashyap, B. M. S. (see Joshi, S. K.)—126, 936
Kasper, J. S. (see Abrahams, S. C.)—127, 2052
Katayama, Mikio. Double quantum transition in electron spin resonance of γ-irradiated acetyl-*d*, *l*-alanine—126, 1440
Katcoff, S. (see Baker, E. W.)—126, 729
—— (see Cumming, J. B.)—125, 2078
Kato, Y. (see Tatsumoto, E.)—128, 2179
Katsura, Shigetoshi. Statistical mechanics of anisotropic linear Heisenberg model—127, 1508
Kattawar, G. W. and M. Eisner. Nuclear magnetic relaxation of three-spin asymmetric molecule in liquid—126, 1054
Kauffman, John W. (see Bauer, Walter)—128, 1497
—— (see Kloske, R.)—126, 123
—— (see Meshii, M.)—125, 1239
Kaufman, Sheldon. Isobaric yields in reactions of 2.9-BeV protons with As^{75}—126, 1189
—— (see Cumming, J. B.)—128, 2392
Kauranen, P. (see Nurmia, M.)—127, 943
Keddy, R. J. (see Mouton, W. L.)—128, 2745
Keefe, D. (see Chamberlain, O.)—125, 1696
Keffer, Frederic. Moriya interaction and problem of spin arrangements in β MnS—126, 896
—— (see Cooper, B. R.)—125, 896
Keller, D. A. (see Shirley, D. A.)—127, 2097
Keller, Joseph M. and Duane C. Wallace. Anharmonic contributions to specific heat—126, 1275
Kelley, J. G., F. E. Steigert, and W. W. Watson. Scattering of O ions from Ar and Xe—126, 2100
Kemp, M. A. R. (see Chadwick, G. B.)—128, 1823
—— (see Fujii, T.)—128, 1836
Kendall, H. W. and I. Talmi. Inelastic electron scattering from V^{51}—128, 792
Kennedy, G. C., A. Jayaraman, and R. C. Newton. Fusion curve and polymorphic transitions of Cs at high pressures—126, 1363
Kennedy, J. and T. D. Spearman. Singularities in partial-wave amplitudes for two ingoing and two outgoing particles—126, 1596
Kennett, T. J. (see Fritze, K.)—127, 1262
Kenney, Robert W. (see Gates, Duane C.)—125, 1310
Kenney, V. P., W. D. Shephard, and C. D. Gall. Single neutral pion production by pions at 1100 MeV—126, 736
Kent, D. W., S. P. Puri, S. C. Snowdon, and W. P. Bucher. Interaction of 3.7-Mev neutrons with medium weight nuclei—125, 331
Kenty, Carl. Volume recombination, constriction, and volt-ampere characteristics of positive column—126, 1235
Kerlee, D. D., H. L. Reynolds, and E. Goldberg. Elastic scattering of heavy ions by Pb^{206}, Pb^{207}, and Pb^{208}—127, 1224
Kern, B. D. (see Gabbard, F.)—128, 1276
Kerner, Edward H. Electromagnetism and gravitation: action-at-a-distance confluence—125, 2184
Kerr, N. A. (see Fultz, S. C.)—127, 1273
Kerth, L. T. (see Chamberlain, O.)—125, 1696
Keržar, B. (see Agdur, B.)—128, 1
Kestner, Neil R. and Oktay Sinanoğlu. Study of electron correlation in He-like systems using exactly soluble model—128, 2687
Keyes, R. W. and R. J. Sladek. Piezo-thermal conductivity effect in Ge—125, 478
Khare, S. P. (see Ghosh, S. N.)—125, 1254
Khokley, W. S. and K. M. van Vliet. Escape mechanism of secondary electrons in polar crystals—128, 1123
Khubchandani, P. G., R. R. Sharma, and T. P. Das. Theory of quadrupole polarizability and antishielding of nuclear quadrupole moments of many-electron ions—126, 594
Kidder, J. N. and W. M. Fairbank. Critical velocities and boundary interactions in isothermal flow of superfluid He—127, 987
Kiel, A. Spin diffusion in inhomogeneously broadened systems—125, 1451
—— Temperature-dependent linewidth of excited states in crystals. I. Line broadening due to adiabatic variation of local fields—126, 1292
—— (see Bray, T.)—127, 730
Kikuchi, T. T. (see Marshall, S. A.)—125, 453
Kim, Y. S. Pion production in low-energy limit—125, 1771
—— (see Jaffe, A. M.)—127, 2261
—— (see Liu, F. F.)—128, 2784
Kim, Yongduk. Production of pion pairs by photon in Coulomb field of nucleus—126, 345
Kingsley, J. D. and J. S. Prener. Spectroscopy and luminescence properties of CdF_2:Eu—126, 458
Kinoshita, T. (see Bethe, H. A.)—128, 1418
Kinsey, James L. (see Curl, R. F., Jr.)—125, 1993
Kinsey, K. F. (see Miyake, K.)—126, 2188
Kirz, Janos, Joseph Schwartz, and Robert D. Tripp. $I=2$ S-wave π-π scattering length—126, 763
Kisliuk, P. (see Geschwind, S.)—126, 1684
Kiss, Zoltan J. Energy levels of divalent Tm in CaF_2—127, 718
Kissinger, P. B. and R. T. Weidner. Saturation effects in moderately diluted cesium chromium alum—126, 506
Kivelson, M. G. (see DuBois, D. F.)—127, 1182
Klauder, J. R. and P. W. Anderson. Spectral diffusion decay in spin resonance experiments—125, 912
Klein, C. A., W. D. Straub, and R. J. Diefendorf. Evidence of single-crystal characteristics in highly annealed pyrolytic graphite—125, 468
Klein, M. L. (see Barron, T. H. K.)—127, 1997

Klein, M. P. (see Geschwind, S.)—**126**, 1684
Kleinman, David A. Laser and two-photon processes—**125**, 87
—— Nonlinear dielectric polarization in optical media—**126**, 1977
—— Theory of second harmonic generation of light—**128**, 1761
—— **and W. G. Spitzer.** Theory of optical properties of quartz in the infrared—**125**, 16
—— (see Spitzer, W. G.)—**126**, 1710
Kleinman, Leonard. Deformation potentials in Si. I. Uniaxial strain—**128**, 2614
—— **and J. C. Phillips.** Covalent bonding and charge density in diamond—**125**, 819
—— (see Phillips, James C.)—**128**, 2098
Klemens, P. G. Localized modes and spin-lattice interactions —**125**, 1795
Kleppner, Daniel, H. Mark Goldenberg, and Norman F. Ramsey. Theory of hydrogen maser—**126**, 603
Kloske, R. and J. W. Kauffman. Quenching studies of Au-Ag alloy—**126**, 123
Knapp, D. E. (see Miyake, K.)—**126**, 2188
Knapp, Edward A. (see Caris, John C.)—**126**, 295
Knight, J. D. (see Bunker, M. E.)—**127**, 844
—— (see Cochran, D. R. F.)—**128**, 1281
Knight, Robert E. and Charles W. Scherr. Two-electron atoms. I. Perturbation study of ground state—**128**, 2675
Knowles, H. B. (see Brown, Lynn B.)—**125**, 1339
Koehler, James S., D. Langreth, and B. von Turkovich. Charged dislocations in ionic crystals—**128**, 573
—— (see Bauer, Walter)—**128**, 1497
—— (see Doyama, M.)—**127**, 21
Koehler, Thomas R. and John R. Pellam. Observation of torque exerted by pure superflow—**125**, 791
Koehler, W. C., J. W. Cable, E. O. Wollan, and M. K. Wilkinson. Magnetic structures of Tm—**126**, 1672
—— (see Cable, J. W.)—**125**, 1860; **127**, 714; **128**, 2118
—— (see Wilkinson, M. K.)—**127**, 2080
Koenig, Seymour H., Rodney D. Brown, III, and Walter Schillinger. Electrical conduction in *n*-type Ge at low temperatures—**128**, 1668
—— (see Jain, A. L.)—**127**, 442
Koester, L. J., Jr. (see Beall, E. F.)—**126**, 1554
Kohn, Walter (see Callaway, Joseph)—**127**, 1913
—— (see Woll, E. J., Jr.)—**126**, 1693
Kolb, Alan C. (see Griem, H. R.)—**125**, 177
—— (see Rostoker, Norman)—**125**, 2208(E)
Kołodziejczak, Jerzy, Benjamin Lax, and Yuichiro Nishina. Semiclassical dispersion theory of interband magneto-optical effects—**128**, 2655
Komar, Arthur. Asymptotic covariant conservation laws for gravitational radiation—**127**, 1411
—— Generators of coordinate transformations in Penrose formalism of general relativity—**127**, 955
—— Indeterminate character of reduction of wave packet in quantum theory—**126**, 365
Korringa, Jan. Spin waves in antiferromagnet with $S=1/2$—**125**, 1972
——, **D. O. Seevers, and H. C. Torrey.** Theory of spin pumping and relaxation in systems with low concentration of electron spin resonance centers—**127**, 1143
—— **and A. Yoshimori.** Theory of relaxation of two-spin system—**128**, 1060
—— (see Yoshimori, A.)—**128**, 1054
Koster, G. F. Symmetry properties of Ga energy bands. Effect of spin-orbit interaction—**127**, 2044
—— (see Slater, J. C.)—**126**, 1307
Kovacs, I. Similarity between spin-spin and spin-orbit interactions in diatomic molecules—**128**, 663
Krall, Nicholas A. (see Gerjuoy, Edward)—**127**, 2105
Kramer, Gustav (see Glendenning, Norman K.)—**126**, 2159
Kramer, P. R. (see Colley, D.)—**128**, 1930
Krass, Allan S. Radiative corrections to electron-proton scattering—**125**, 2172
Kraushaar, J. J. (see Wilson, R. R.)—**125**, 1655
Krizan, John E. and Peter Havas. Relativistic corrections in statistical mechanics of interacting particles—**128**, 2916
Królikowski, Wojciech. General formalism obeying intrinsic exclusion principle—**126**, 1195
Kroll, Norman M. Parametric amplification in spatially extended media and application to design of tuneable oscillators at optical frequencies—**127**, 1207
Kromminga, A. J. and M. Bolsterli. Perturbation theory of many-boson system—**128**, 2887
Krone, R. W. (see Prosser, F. W., Jr.)—**125**, 594
Kruse, T. H. (see Nessin, M.)—**125**, 639
Kuehner, J. A. Spin and parity assignments to 5.63-MeV and 5.80-MeV levels of Ne^{20}—**125**, 1650
Kulp, B. A. Displacement of Cd atom in single crystal CdS by electron bombardment—**125**, 1865
Kunz, P. D. Inelastic electron scattering from Be^{9} and C^{12}—**128**, 1343
Kunzler, J. E., F. S. L. Hsu, and W. S. Boyle. Magnetothermal oscillations. Oscillatory dependence of temperature on magnetic field—**128**, 1084
Kuo, L. G. (see Ilakovac, K.)—**128**, 2739
Kuppermann, Aron (see Belford, Geneva G.)—**128**, 524
Kurtz, S. K. and W. G. Nilsen. Paramagnetic resonance spectra of Cr^{3+} in $ZnWO_4$—**128**, 1586
Kushida, T. (see Silver, A. H.)—**125**, 1147
Kusmiss, J. H. (see Stewart, A. T.)—**128**, 118
Kycia, T. F. (see Cool, R. L.)—**127**, 2223
Kyi, Ru-tao. Paramagnetic resonance of Mo^{5+} in TiO_2—**128**, 151

LaBate, E. E. (see Crowell, C. R.)—**127**, 2006
Ladenbauer-Bellis, Inge-Maria, Ivor L. Preiss, and C. E. Anderson. Excitation functions for heavy-ion-induced reactions on Al^{27}—**125**, 606
—— (see Read, Jaques B. J.)—**127**, 1722
La Force, R. C. (see Streever, R. L.)—**128**, 1632
Lagnaux, J. B. (see Jones, B. D.)—**127**, 236
Laidler, J. B. (see Watt, D. E.)—**126**, 264
Lalevic, Bogoljub. Fluctuations of resistance and resistance levels in intermediate state of superconductors—**128**, 1070
Lam, D. J. (see Van Ostenburg, D. O.)—**126**, 938; **128**, 1550
Lambe, J. (see Silver, A. H.)—**125**, 1147
Lambert, R. H. and F. M. Pipkin. Hfs of atomic P—**128**, 198
—— (see Pipkin, F. M.)—**127**, 787
Lampert, Murray A. Double injection in insulators—**125**, 126
Landshoff, P. V. and S. B. Treiman. Some experimental consequences of triangle singularities in production processes—**127**, 649
Lane, R. O., A. J. Elwyn, and A. Langsdorf, Jr. Polarization and differential cross section for neutron scattering from Si —**126**, 1105
—— (see Elwyn, A. J.)—**128**, 779
Lang, G. (see Jha, S.)—**128**, 1160
Langer, J. S. Evaluation of Kubo's formula for impurity resistance of interacting electron gas—**127**, 5
—— Thermal conductivity of system of interacting electrons—**128**, 110
Langer, L. M. (see Howe, D. A.)—**128**, 2748
Langreth, D. (see Koehler, J. S.)—**128**, 573
Langsdorf, A., Jr. (see Elwyn, A. J.)—**128**, 779
—— (see Lane, R. O.)—**126**, 1105
Lankard, J. R. (see Sorokin, P. P.)—**127**, 503
—— (see Title, R. S.)—**128**, 62
Larsh, A. (see Perlman, I.)—**127**, 917
Lassila, K. E., M. H. Hull, Jr., H. M. Ruppel, F. A. McDonald, and G. Breit. Note on nucleon-nucleon potential—**126**, 881

—— (see Breit, G.)—**128**, 826
—— (see Hull, M. H., Jr.)—**128**, 830
Latimer, R. (see Perlman, I.)—**127**, 917
Latimer, Robert M. (see Thomas, T. Darrah)—**126**, 1805
Latter, R. (see Karzas, W. J.)—**126**, 1919
Lawson, A. W. (see Mase, Shoichi)—**127**, 1030
Lawson, R. D. and B. Zeidman. Seniority mixing in $1f_{7/2}$ nuclei—**128**, 821
Lax, Benjamin (see Kołodziejczak, Jerzy)—**128**, 2655
Leader, E. (see Hearn, A. C.)—**126**, 789
Leaf, Boris. Dissipative potentials and motion of classical charge—**127**, 1369
Lebowitz, Joel L. and Abner Shimony. Statistical mechanics of open systems—**128**, 1945
Lederman, L. M. (see Shapiro, G.)—**125**, 1022
Lee, Benjamin W. Theorem on crossing relations and its application to KN and $\bar{K}N$ scattering processes—**125**, 2201
—— **and R. F. Sawyer.** Leading Regge trajectory in $\lambda\varphi^4$ theory—**127**, 2274
—— **and R. F. Sawyer.** Regge poles and high-energy limits in field theory—**127**, 2266
—— (see Cook, L. F., Jr.)—**127**, 283; **127**, 297
Lee, Juliet (see Bardon, Marcel)—**126**, 1826
Lee, T. D. Application of ξ-limiting process to intermediate bosons—**128**, 899
—— **and C. N. Yang.** High-energy neutrino reactions without production of intermediate bosons—**126**, 2239
—— **and C. N. Yang.** Theory of charged vector mesons interacting with electromagnetic field—**128**, 885
Lefebvre-Brion, H. (see Bessis, N.)—**128**, 213
Lefevre, H. W., R. R. Borchers, and C. H. Poppe. Neutrons from deuteron breakup on D, T, and He^4—**128**, 1328
Leffler, R. G. and D. J. Montgomery. Effect of isotopic composition on electrical resistance of Li—**126**, 53
Lefrancois, J. (see Hoffman, R. A.)—**125**, 973
Legvold, S. (see Strandburg, D. L.)—**127**, 2046
Lehman, G. W., T. Wolfram, and R. E. De Wames. Axially symmetric model for lattice dynamics of metals with application to Cu, Al, and ZrH_2—**128**, 1593
Lehmann, P., R. Taylor, and Richard Wilson. Electron-proton scattering at low momentum transfers—**126**, 1183
Leiss, J. E. (see Schrack, R. A.)—**127**, 1772
Leith, D. W. G. S. (see Lewis, G. M.)—**125**, 378
Lemonick, A. (see Chamberlain, O.)—**125**, 1696
Lempicki, A. (see Samelson, H.)—**125**, 901
Leon, M. and H. A. Bethe. Negative meson absorption in liquid hydrogen—**127**, 636
Leonard, A. (see Ferziger, J. H.)—**128**, 2188
Lerner, Lawrence S. Shubnikov-de Haas effect in Bi—**127**, 1480
Leslie, D. H. (see Hake, R. R.)—**127**, 170
Leupold, H. A. (see Hirshfeld, A. T.)—**127**, 1501
Levin, J. S. (see Thomson, D. B.)—**125**, 2049
Levine, M. A. (see Hand, G. L.)—**127**, 1856
Levine, Paul H. and Oldwig von Roos. Plasma theory of many-electron atom—**125**, 207
Levinger, J. S. (see Razavy, M.)—**125**, 269
Levi Setti, R. (see Davis, D. H.)—**127**, 605
Levy, H. B. (see Hicks, H. G.)—**128**, 700
Levy, Paul W. (see Wylie, D. W.)—**125**, 451
Lewis, G. M., R. E. Azuna, E. Gabathuler, D. W. G. S. Leith, and W. R. Hogg. Photoproduction of positive pions from H near threshold—**125**, 378
Lewis, H. W. Straggling effects on resonant yields—**125**, 937
Li, James C. M. Persistency, pseudo-entropy, and thermokinetic potential—**127**, 1784
Libchaber, A. and R. Veilex. Wave propagation in gyromagnetic solid conductor: helicon waves—**127**, 774
Lichten, William. Metastable H_2 molecules. II. Fine structure of parahydrogen—**126**, 1020
Lichtenberg, D. B. and G. C. Summerfield. G parity and interactions of heavy mesons—**127**, 1806; **128**, 2926(E)
Lieb, Elliott and Daniel Mattis. Theory of ferromagnetism and ordering of electronic energy levels—**125**, 164
Lieber, A. J., F. H. Schmidt, and J. B. Gerhart. Proton angular distributions for (α,p) reactions on C^{12}, Al^{27}, and P^{31}—**126**, 1496
Lifson, H. (see Pekeris, C. L.)—**126**, 1057
Lillethun, Endre. Production of charged pions in collisions of 450-MeV protons with various nuclei—**125**, 665
—— (see Cocconi, G.)—**126**, 277
Lin, Chun C. and Robert M. St. John. Collisional excitation transfer to 4^1D state in He by multiple state mechanism—**128**, 1749
Lin, E. K. (see Jolly, R. K.)—**128**, 2292
Lincke, R. (see Berg, H. F.)—**125**, 199
Lind, Edward L. (see Bube, Richard H.)—**128**, 532
Lindenbaum, S. J. (see Melissinos, A. C.)—**128**, 2373
Lindenfeld, P. and W. B. Pennebaker. Lattice conductivity of Cu alloys—**127**, 1881
Linder, B. and A. Zucker. Radiative capture of N^{14} on P^{31}—**127**, 1280
Linder, M. (see Miskel, J. A.)—**128**, 2717
Lindgren, Ingvar P. K. (see Cabezas, Amado Y.)—**126**, 1004
Lindsay, Richard H. and Edward F. Neuzil. (p,Be^7) reaction in Al and Mg from 27 to 31.5 MeV—**127**, 1269
Linsley, John and Livio Scarsi. Arrival times of air shower particles at large distances from axis—**128**, 2384
Lipkin, H. J., M. Peshkin, and L. J. Tassie. Flux quantization and current-carrying state in superconducting cylinder—**126**, 116
Lipworth, Edgar (see Alpert, Seymour S.)—**125**, 256
Litton, C. W. and D. C. Reynolds. Edge emission in CdS crystals that show mechanically excited emission—**125**, 516
Liu, F. F., F. J. Loeffler, T. R. Palfrey, and Y. S. Kim. Polarization of high-energy photoprotons from light elements—**128**, 2784
Liu, L. Effects of spin-orbit coupling in Si and Ge—**126**, 1317
Liu, Lu Sun. Vertex function, coupling constant, and composite particle—**125**, 761
Liu, S. H. Pressure dependence of Curie temperature of ferromagnetic metals—**127**, 1889
—— Theory of superconductivity—**125**, 1244
Lobkowicz, Frederick (see Gotow, Kazuo)—**127**, 2206
Lockwood, Grant J. and Edgar Everhart. Resonant electron capture in violent proton-H atom collisions—**125**, 567
Loebenstein, H. M. (see Goldring, G.)—**127**, 2151
Loeffler, F. J. (see Liu, F. F)—**128**, 2784
Loferski, J. J. (see Flicker, H.)—**128**, 2557
Logan, R. A., A. G. Chynoweth, and B. G. Cohen. Avalanche breakdown in GaAs p-n junctions—**128**, 2518
—— (see Chynoweth, A. G.)—**125**, 877
Loh, E. C. (see Boyarski, A. M.)—**128**, 2398
London, H., G. R. Clarke, and Eric Mendoza. Osmotic pressure of He^3 in liquid He^4, with proposals for refrigerator to work below 1°K—**128**, 1992
Longo, Michael J. and Burton J. Moyer. Nucleon and nuclear cross sections for positive pions and protons above 1.4 BeV/c—**125**, 701
Lopez, F. (see Culshaw, W.)—**128**, 1747
Lord, J. J. (see Blue, M. H.)—**125**, 1386
Loscoe, C. (see Gärtner, W. W.)—**126**, 1680
Loskutov, Yu. M. (see Sokolov, A. A.)—**125**, 731
Louisell, W. H. (see Yariv, Amnon)—**125**, 558
Lounasmaa, O. V. Specific heat of Ho metal between 0.38 and 4.2°K—**128**, 1136
—— Specific heat of Sm metal between 0.4 and 4°K—**126**, 1352

——, **C. H. Cheng, and Paul A. Beck.** Nuclear magnetic specific heat of ferromagnetic Fe alloys with Sb and Re—**128**, 2153
—— **and R. A. Guenther.** Specific heat of Dy metal between 0.4 and 4°K—**126**, 1357
—— **and Pat R. Roach.** Specific heat of Tb metal between 0.37 and 4.2°K—**128**, 622
Louttit, R. J. (see Hart, E. L.)—**126**, 747
Lovejoy, C. A. (see Judd, B. R.)—**128**, 1733
Lowe, J., C. L. McClelland, and J. V. Kane. Lifetimes of first excited states of C^{15} and B^{10}—**126**, 1811
Lozhkin, O. V. (see Goritchev, P. A.)—**126**, 2196
Luban, Marshall. Statistical mechanics of nonideal boson gas. Pair Hamiltonian model—**128**, 965
Lucasson, P. G. and R. M. Walker. Production and recovery of electron-induced radiation damage in number of metals—**127**, 485
—— **and R. M. Walker.** Variation of radiation damage parameters in metals—**127**, 1130
Ludwig, G. W. (see Segall, B.)—**128**, 76
—— (see Woodbury, H. H.)—**126**, 466
Luers, D. (see Hart, E. L.)—**126**, 747
Lundy, Richard A. Precision measurement of μ^+ lifetime—**125**, 1686
Lurié, D. (see Nambu, Y.)—**125**, 1429
Lurio, Allen. Hfs of ^3P states of Zn^{67} and Mg^{25}—**126**, 1768
——, **M. Mandel, and R. Novick.** Second-order hyperfine and Zeeman corrections for (sl) configuration—**126**, 1758
Lüscher, E. (see Holloway, W. W., Jr.)—**126**, 2109
Luszczynski, K., R. E. Norberg, and J. E. Opfer. Nuclear magnetic resonance in gaseous He^3—**128**, 186
Lutes, O. S. and J. L. Schmit. Magnetic remanence in Cu(Mn) alloys—**125**, 433
Luttinger, J. M. and P. Nozières. Derivation of Landau theory of Fermi liquids. II. Equilibrium properties and transport equation—**127**, 1431
—— (see Nozières, P.)—**127**, 1423
Lynch, David W. Color centers in additively colored CsBr—**127**, 1537
Lynch, Gerald R. (see Button, Janice)—**126**, 1858
—— (see Xuong, Nguyen-huu)—**128**, 1849
Lynn, J. E. (see Jackson, H. E.)—**127**, 461
Lynton, Ernest A. and David McLachlan. Boundary scattering effects on superconducting transition temperature of In—**126**, 40
—— (see Gayley, R. I., Jr.)—**126**, 43
Lyons, Donald H. Note on critical concentrations in magnetism—**128**, 2022
——, **T. A. Kaplan, K. Dwight, and N. Menyuk.** Classical theory of ground spin-state in cubic spinels—**126**, 540
—— (see Menyuk, N.)—**127**, 1983
Lysov, B. A. (see Sokolov, A. A.)—**128**, 2422

MacDonald, Harold E. (see Bube, Richard H.)—**128**, 2062; **128**, 2071
MacDowell, S. W., A. L. L. Videira, and N. Zagury. Production and spin of K^* resonance—**126**, 878
Macfarlane, M. H., B. J. Raz, J. L. Yntema, and B. Zeidman. (d,t) reaction studies on Fe and Ni—**127**, 204
Macfarlane, Ronald D. α-emitting isomeric state of Tb^{149}—**126**, 274
—— **and Ismael Almodovar.** Study of $Sm^{149}(n,\alpha)Nd^{146}$ reaction with thermal neutrons—**127**, 1665
MacLeod, D. E. (see Van Ostenburg, D. O.)—**128**, 1550
Maglić, Bogdan C. (see Button, Janice)—**126**, 1858; **127**, 1297
—— (see Stevenson, M. L.)—**125**, 687; **125**, 2208(E)
Mahanthappa, Kalyana T. Multiple production of photons in quantum electrodynamics—**126**, 329
—— (see Fronsdal, Christian)—**127**, 1847
Mahendroo, P. P. and A. W. Nolle. Nuclear magnetic relaxation in ionic crystals at high temperatures—**126**, 125
Mahon, H. P. (see Verber, C. M.)—**125**, 1149
Mahr, Herbert. Ultraviolet absorption of KI diluted in KCl crystals—**125**, 1510
Majumdar, S. Datta. Wave equations in curved space-time—**126**, 2227
Maki, August H. (see Waters, Edward L.)—**125**, 233
Malik, S. S. (see Van Patter, D. M.)—**128**, 1246
Malmberg, P. R. and S. C. Snowdon. Elastic scattering of 6.7-MeV neutrons from Ag and In—**128**, 351
Mandel, M. (see Lurio, A.)—**126**, 1758
Mandelstam, Stanley (see Chew, Geoffrey F.)—**126**, 1202
Mann, Lloyd G., Stewart D. Bloom, and R. J. Nagel. Circular polarization measurements in β decay of V^{48}, Co^{56}, Fe^{59}, and Cs^{134}—**127**, 2134
—— (see Bloom, Stewart D.)—**125**, 2021
Manning, G. (see Cocconi, G.)—**126**, 277
Manning, John R. Correlation factors for impurity diffusion—fcc lattice—**128**, 2169
—— Drift mobility of ionic impurity in electric field—**125**, 103
Many, A. and G. Rakavy. Theory of transient space-charge-limited currents in solids in presence of trapping—**126**, 1980
——, **S. Z. Weisz, and M. Simhony.** Space-charge-limited currents in iodine single crystals—**126**, 1989
Mapleton, Robert A. Electron capture from atomic H by protons—**126**, 1477
Mapother, D. E. Thermodynamic consistency of critical field and specific heat data for superconducting Sn and In—**126**, 2021
—— (see Mould, R. E.)—**125**, 33
—— (see Otter, F. A.)—**125**, 1171
Maradudin, A. A. and A. E. Fein. Scattering of neutrons by anharmonic crystal—**128**, 2589
—— **and P. A. Flinn.** Debye-Waller factor for Mössbauer resonant impurity atoms—**126**, 2059
——, **P. A. Flinn, and S. Ruby.** Velocity shift of Mössbauer resonance—**126**, 9
—— (see Wallis, R. F.)—**125**, 1277
March, N. H. and A. M. Murray. Enhancement of electron density around positive point charges in metals and lifetimes of positrons—**126**, 1480
—— (see Flower, M.)—**125**, 1144
March, R. H. (see Woods, A. D. B.)—**128**, 1112
Marcus, J. A. (see Reed, W. A.)—**126**, 1298
Marinace, J. C. (see Nathan, Marshall I.)—**128**, 2149
Marino, Lawrence L., A. C. H. Smith, and E. Caplinger. Charge transfer between positive Cs ions and Cs atoms—**128**, 2243
—— (see Rothe, Erhard W.)—**125**, 582; **126**, 598
Mark, Hans (see Jopson, R. C.)—**127**, 1612; **128**, 2671
Marr, Robert B. (see Durand, Loyal, III)—**126**, 1882
Marrone, M. J. (see Isoya, A.)—**128**, 800
Marrus, Richard (see Cabezas, Amado Y.)—**126**, 1004
Marsh, K. V. (see Miskel, J. A.)—**128**, 2717
Marshak, H., Hans Postma, V. L. Sailor, F. J. Shore, and C. A. Reynolds. Spin assignments of low-energy resonances using polarized neutrons and polarized Sm^{149} nuclei—**128**, 1287
—— (see Postma, Hans)—**126**, 979
—— (see Sailor, V. L.)—**127**, 1124
Marshall, G. D. (see Strong, K. A.)—**125**, 933
Marshall, L. (see Cool, R. L.)—**127**, 2223
Marshall, S. A., T. T. Kikuchi, and A. R. Reinberg. Paramagnetic resonance absorption of divalent Ni in α-Al_2O_3 single crystal—**125**, 453
—— (see Mergerian D.)—**127**, 2015
Marshall, W. (see Johnson, C. E.)—**126**, 1503
Martalogu, N. (see Hulubei, H.)—**126**, 2174

Martienssen, W. (see Timusk, T.)—**128**, 1656
Martin, D. W. (see Hooper, J. W.)—**125**, 2000
Martin, F. W. and L. C. Northcliffe. Energy loss and effective charge of He, C, and Ar ions below 10 MeV/amu in gases—**128**, 1166
Martin, H. J., Jr., M. B. Sampson, and R. L. Preston. Study of Zr^{92} levels excited in (d,p) reaction—**125**, 942
Martin, Jerry B. (see Cooper, John W.)—**126**, 1482
Marton, L., J. Arol Simpson, H. A. Fowler, and N. Swanson. Plural scattering of 20-keV electrons in Al—**126**, 182
Mase, Shoichi, S. von Molnar, and A. W. Lawson. Galvanomagnetic tensor of Bi at 20.4°K—**127**, 1030
Masterson, K. S., Jr. (see Brueckner, K. A.)—**128**, 2267
Masuda, Yoshika. Nuclear spin-lattice relaxation in superconducting Al alloys—**126**, 1271
—— **and A. G. Redfield.** Nuclear spin-lattice relaxation in superconducting Al—**125**, 159
Mathur, V. S., S. N. Mukherjee, and M. L. Rustgi. Effect of hard core on photodisintegration cross sections of H^3—**127**, 1663
Matsen, F. A. (see Benton, E. E.)—**128**, 206
—— (see Scherr, Charles W.)—**127**, 830
Matthias, B. T., T. H. Geballe, V. B. Compton, E. Corenzwit, and G. W. Hull, Jr. Superconductivity of Cr alloys—**128**, 588
—— (see Clogston, A. M.)—**125**, 541
—— (see Giorgi, A. L.)—**125**, 837
Matthias, Eckart, Werner Schneider, and Rolf M. Steffen. Nuclear level splitting caused by combined electric quadrupole and magnetic dipole interaction—**125**, 261
Mattis, Daniel and Wilm E. Donath. Role of Fermi surface and crystal structure in theory of magnetic metals—**128**, 1618
—— (see Lieb, Elliott)—**125**, 164
Mattuck, R. D. Effect of local order on energy bands in binary alloys—**127**, 738
Maung, Tin (see Chamberlain, O.)—**125**, 1696
Maximon, L. C. and Haakon Olsen. Measurement of photon polarization by pair production—**126**, 310
Maxson, Donald R. (p,α) reactions in Li^7, Be^9, and C^{12} at 15.0–18.6 MeV—**128**, 1321
Maxwell, J. R. (see Parkinson, W. C.)—**126**, 1160
Mayer-Kuckuk, T. and F. C. Michel. Comparison of β spectra of B^{12} and N^{12}—**127**, 545
Mazo, J. (see Arnowitt, R.)—**125**, 744
McCarthy, A. L. (see Cohen, B. L.)—**126**, 698; **127**, 1678
—— (see Fulmer, R. H.)—**128**, 1302
McCarthy, I. E. Optical model in interior of nucleus—**128**, 1237
McClelland, C. L. (see Lowe, J.)—**126**, 1811
McCliment, E. R. and K. Nishijima. Dynamical approach to selection rule $|\Delta I| = 1/2$—**128**, 1970
McClin, R. (see Facetti, J.)—**127**, 1690
McClure, B. T. Current buildup in neon gas discharges at small overvoltages—**125**, 11
McClure, G. W. and K. D. Granzow. High-voltage glow discharges in D_2 gas. II. Cathode fall theory—**125**, 3
—— (see Granzów, K. D.)—**125**, 1792
McClure, J. W. (see Anderson, J. D.)—**126**, 2170
—— (see Wong, C.)—**128**, 2339
McCollum, D. C., Jr., and Henry B. Silsbee. Specific heats of Rb and Cs between 1.3°K and 12°K—**127**, 119
McCullen, J. D. (see Wilson, R. R.)—**125**, 1655
McDaniel, E. W. (see Hooper, J. W.)—**125**, 2000
McDonald, F. A. (see Hull, M. H., Jr.)—**128**, 830
—— (see Lassila, K. E.)—**126**, 881
McEachran, Robert P. (see Smith, Kenneth)—**125**, 553
McFarland, Robert H. and Edward A. Soltysik. Magnetic field dependence of polarized He light excited by electrons—**128**, 2222
—— **and Edward A. Soltysik.** Polarization of $\lambda = 5876$ Å and $\lambda = 6679$ Å lines in He excited by electrons—**128**, 1758
—— **and Edward A. Soltysik.** Polarization of light resulting from excitation of He by electrons—**127**, 2090
McGowan, F. K. and P. H. Stelson. Coulomb excitation of second 2^+ states in Ge^{74}, Ge^{76}, Se^{76}, Se^{78}, and Se^{80}—**126**, 257
—— (see Ritter, R. C.)—**128**, 2320
—— (see Robinson, R. L.)—**125**, 1373
McGrath, J. W. (see Williams, R. M.)—**127**, 184
McGrath, Robert L. Population ratios of Be^7, Li^7, and B^{10} states from Li^6 on Li^6 and Be^9 as functions of bombarding energy—**127**, 2138
McIlwain, R. L., K. J. Deahl, M. Derrick, J. G. Fetkovich, and T. H. Fields. Reaction $p+p \rightarrow \pi^+ + p + n$ at 405 MeV—**127**, 239
McIntyre, J. A., S. D. Baker, and K. H. Wang. Investigation of nuclear surface by means of elastic scattering of heavy ions—**125**, 584
—— (see Wang, K. H.)—**127**, 187
McKean, R. S., Jr. Vector mesons and nucleon-nucleon potentials—**125**, 1399
McLachlan, David (see Lynton, Ernest A.)—**126**, 40
McVittie, G. C. Photon density and γ-ray flux at point in expanding universe—**128**, 2871
McVoy, K. W. and L. Van Hove. Inelastic electron-nucleus scattering and nucleon-nucleon correlations—**125**, 1034
McWeeny, R. Perturbation theory for Fock-Dirac density matrix—**126**, 1028
Mead, C. A. Electron transport mechanisms in thin insulating films—**128**, 2088
Mead, C. Alden. Complex refractive index of ideal monatomic gas—**128**, 1753
Mead, James B. and Bernard L. Cohen. Low-resolution survey of (d,α) reactions in heavy nuclei—**125**, 947
Meadows, J. W. and J. F. Whalen. Energy dependence of prompt $\bar{\nu}$ for neutron-induced fission of U^{235}—**126**, 197
Meeron, Emmanuel. Indirect exponential coupling in classical many-body problems—**126**, 883
Meetz, K. Application of general unitarity to pion-nucleon scattering—**125**, 714
Megerle, K. (see Glaever, I.)—**126**, 941
Megill, Lawrence R. (see Carleton, Nathaniel P.)—**126**, 2089
Mehling, O. (see Daniel, H.)—**128**, 261
Melissinos, A. C., T. Yamanouchi, G. G. Fazio, S. J. Lindenbaum, and L. C. L. Yuan. π-meson production in 2.9-BeV p-p collisions—**128**, 2373
Melkanoff, M. A. (see Helmy, E.)—**127**, 254
—— (see Nodvik, J. S.)—**125**, 975
Mencuccini, C., R. Querzoli, and G. Salvini. Polarization of recoil proton from neutral photoproduction at 800 and 910 MeV—**126**, 1181
Mendoza, Eric (see London, H.)—**128**, 1992
Menotti, P. (see Hamilton, J.)—**128**, 1881
Mentillo, L. R. (see Carpenter, R. D.)—**125**, 282
Menyuk, N., K. Dwight, D. Lyons, and T. A. Kaplan. Classical theory of ground spin-state in normal tetragonal spinels. I. Néel, Yafet-Kittel, and collinear antiferromagnetic modes—**127**, 1983
—— (see Lyons, D. H.)—**126**, 540
Mergerian, D. and S. A. Marshall. Irradiation-produced paramagnetic oxides of N in single-crystal KN_3—**127**, 2015
Merriam, M. F., R. Smoluchowski, and D. A. Wiegand. High-temperature thermal expansion of rocksalt—**125**, 65
——, **D. A. Wiegand, and R. Smoluchowski.** Enhanced thermal expansion in x-rayed rocksalt—**125**, 52
Merz, E. R. and A. A. Caretto, Jr. Recoil behavior of $Cu^{65}(p,pn)Cu^{64}$ reaction—**126**, 1173
Merz, W. J. (see Fatuzzo, E.)—**127**, 2036
Meservey, R. Flow instability in liquid He II—**127**, 995

Meshii, M., T. Mori, and J. W. Kauffman. Recovery of electrical resistivity in Au quenched from below 700°C—125, 1239
Messel, H. (see Crawford, D. F.)—128, 2352
Mette, H. (see Gärtner, W. W.)—126, 1680
Metzger, Franz R. Mean life of 265-keV excited state in As^{75}—127, 220
—— Properties of 3.9-keV excited state of Pd^{105}—128, 2332
Meyer, Axel and R. B. Murray. Effect of energetic secondary electrons on scintillation process in alkali halide crystals—128, 98
Meyer, Horst (see Harris, A. Brooks)—127, 101
—— (see Thompson, A. Low)—128, 509
Meyer, L., H. T. Davis, Stuart A. Rice, and R. J. Donnelly. Mobility of ions in liquid He^4I and He^3 as a function of pressure and temperature—126, 1927
Meyer, S. L. (see Fitch, V. L.)—126, 1849
Meyerhof, W. E. Threshold effects in elastic scattering according to optical model—128, 2312
Meyerhofer, Dietrich, George A. Brown, and H. S. Sommers, Jr. Degenerate Ge. I. Tunnel, excess, and thermal current in tunnel diodes—126, 1329
Michel, F. C. (see Mayer-Kuckuk, T.)—127, 545
Michel, R. E. and B. Rosenblum. Magnetoplasma resonance in Ge—128, 1646
Micheletti, S. (see Isoya, A.)—128, 806
Mieher, Robert L. Quadrupole nuclear relaxation in III–V compounds—125, 1537
Mihelich, J. W. (see Harmatz, B.)—128, 1186
—— (see Schwerdtfeger, C. F.)—125, 1641
Mikoshiba, Nobuo. Strong-field magnetoresistance of impurity conduction in *n*-type Ge—127, 1962
—— **and Shun-ichi Gonda.** Weak-field magnetoresistance of impurity conduction in *n*-type Ge—127, 1954
Milford, Frederick J. (see Jones, William H., Jr.)—125, 1259
Milgram, A. and M. Parker Givens. Extreme uv absorption by LiF—125, 1506
Miller, Allen, David Pines, and Philippe Nozières. Elementary excitations in liquid He—127, 1452
Miller, D. W., H. E. Wegner, and W. S. Hall. Energy and orbital angular momentum dependence of Coulomb-distorted (d,p) angular distributions—125, 2054
Miller, Douglas G. Nucleon form factors in helicity representations—127, 1365
Miller, J. M. (see Hahn, R. L.)—125, 2208(E)
Miller, P. B. and R. R. Haering. Cyclotron resonance in metals with H perpendicular to surface—128, 126
Miller, Robert C. and Albert Savage. Harmonic generation and mixing of $CaWO_4:Nd^{3+}$ and ruby pulsed laser beams in piezoelectric crystals—128, 2175
—— (see Spitzer, W. G.)—126, 1710
Miller, S. C. and R. M. Wilcox. Left-right asymmetry in pair annihilation for transversaliy polarized positrons—125, 629
Miller, S. R., R. Blinc, M. Brenman, and J. S. Waugh. Nuclear spin-lattice relaxation in some ferroelectric ammonium salts—126, 528
Mills, R. L. (see Goldstein, L.)—128, 2479
Milton, J. C. D. (see Bowman, Harry R.)—126, 2120
Miskel, John A., K. V. Marsh, M. Linder, and R. J. Nagle. Neutron-activation cross section—128, 2717
—— (see Bloom, Stewart D.)—125, 2021
Mitra, A. N. Model for two-pion and three-pion resonances—127, 1342; 128, 2925(E)
Mitra, S. K. (see Bhattacherjee, S. K.)—126, 1154
Mitrofanov, N. Single transmission effect for slow neutrons passing through magnetized Pd-Ni alloy, containing absorbed H—125, 1141
Mittleman, M. H. Formal theory of rearrangement collisions. II—126, 373
—— **and Robert Pu.** Optical potential for closely coupled states—126, 370
—— **and Fred A. Wolf.** Coherent scattering of photons by atomic hydrogen—128, 2686
Miyake, K., K. F. Kinsey, and D. E. Knapp. $\pi^- + p \rightarrow \pi^0 + n$ charge exchange cross sections at 20.7 and 31.0 MeV—126, 2188
Miyamoto, Shigeko (see Mizuno, Hiroyuki)—125, 833
Mizuno, Hiroyuki and Shigeko Miyamoto. Influence of dislocation on diffusion rate of F centers in KCl—125, 833
Mizushima, Masataka (see Frey, Donald A.)—128, 2683
Mock, J. B. (see Peter, M.)—126, 1395
Moffat, J. W. (see Bransden, B. H.)—128, 859
Mohanty, R. C. (see Sandhu, H. S.)—125, 1017
Mohling, Franz. Energy-density relation for nuclear matter—128, 1365
Mollenauer, James F. γ-ray emission from compound nucleus reactions of He and C ions—127, 867
Montgomery, D. J. (see Ban, N. T.)—128, 6
—— (see Leffler, R. G.)—126, 53
Montgomery, David and David Gorman. Landau damping to all orders—126, 2261(E)
Montgomery, Hugh, Dale T. Teaney, and Walter M. Walsh, Jr. Hyperfine field and ground-state spin alignment in antiferromagnetic $KMnF_3$—128, 80
Moore, T. W. and F. W. Spong. Cyclotron resonance in Al—125, 846; 126, 2261(E)
Moran, T. (see Cohen, V. W.)—127, 517
—— (see Penselin, S.)—127, 524
Moravcsik, Michael J. Boson photoproduction experiments—125, 1088
—— Search for spin-1 intermediate meson in neutral pion photoproduction—125, 734
Morel, Pierre and P. W. Anderson. Calculation of superconducting state parameters with retarded electron-phonon interaction—125, 1263
—— **and Philippe Nozières.** Lifetime effects in condensed He^3—126, 1909
Morgan, Gerry H. and Edgar Everhart. Measurements of inelastic energy loss in large-angle Ar^+ on Ar collisions at keV energies—128, 667
Mori, T. (see Meshii, M.)—125, 1239
Morinigo, F. B. (see Nordberg, M. E., Jr.)—125, 321
Morris, T. W. (see Hart, E. L.)—126, 747
Morrish, A. H. (see Valstyn, E. P.)—128, 2078
Morrison, C. A. (see Karayianis, N.)—126, 1443
Morrison, David L. and Albert A. Caretto, Jr. Excitation functions of (p,xp) reactions—127, 1731
Morton, John R., III, Gregory R. Choppin, and Bernard G. Harvey. Study of reactions $Pr^{141}(C^{12},4n)Tb^{149}$ and $Te^{130}(C^{12},5n)Ce^{137m}$ by means of recoil techniques—128, 265
—— **and Bernard G. Harvey.** Application of recoil techniques to study of reactions $Ra^{226}(\alpha,4n)Th^{226}$, $Pb^{208}(\alpha,2n)Po^{210}$, and $Pb^{207}(\alpha,n)Po^{210}$—126, 1798
Moscati, G. and J. Goldemberg. Delayed neutron yields in photofission of U^{238} and Th^{232}—126, 1098
Moser, C. M. (see Bessis, N.)—128, 213
Moshinsky, M. Soluble many-body problem for particles in Coulomb potential—126, 1880
Mottleson, B. R. (see Bohr, A.)—125, 495
Motz, Lloyd. Quantization and classical Hamilton-Jacobi equation—126, 378
Mould, R. E. and D. E. Mapother. Effect of precipitation hardening on superconducting properties of Al—125, 33
Mouton, W. L., J. P. F. Sellschop, and R. J. Keddy. Mean lifetime of first excited states of Li^7 and Na^{23} by resonance scattering of bremsstrahlung—128, 2745
Moyer, Burton J. (see Devlin, Thomas J.)—125, 690
—— (see Hinrichs, C. Keith)—127, 617
—— (see Longo, Michael J.)—125, 701

Mukherjee, Paresh and Bernard L. Cohen. Nuclear structure studies in Pb region with stripping reactions—**127**, 1284
—— (see Cohen, B. L.)—**127**, 1678
Mukherjee, S. N. (see Mathur, V. S.)—**127**, 1663
Muldawer, L. Spectral reflectivity as function of temperature of β-brass type alloys—**127**, 1551
Mullen, J. A. (see Haus, H. A.)—**128**, 2407
Müller, O. (see Daniel, H.)—**128**, 261
Mullin, C. J. (see Johnson, W. R.)—**126**, 352
—— (see Weber, T. A.)—**126**, 615
Murakawa, Kiyoshi (see Ross, John S.)—**128**, 1159
Murphy, P. G. (see Beall, E. F.)—**126**, 1554
Murray, A. M. (see March, N. H.)—**126**, 1480
Murray, R. B. Specific heat of single-crystal $MnCl_2$ in applied magnetic fields—**128**, 1570
—— (see Meyer, Axel)—**128**, 98
Mycielski, Jerzy. One-phonon transition rate in impurity conduction—**125**, 1975
—— Two-phonon transitions in impurity conduction in semiconductors—**125**, 46

Nagel, R. J. (see Mann, Lloyd G.)—**127**, 2134
Nagle, D. E., P. P. Craig, P. Barrett, D. R. F. Cochran, C. E. Olsen, and R. D. Taylor. Internal fields at low temperatures in CoPd alloys—**125**, 490
Nagle, R. J. (see Miskel, J. A.)—**128**, 2717
Nakamura, Tuto. Short-range order effect on magnetic anisotropy near transition point—**128**, 2500
Nakanishi, Noboru. Fundamental properties of perturbation-theoretical integral representations—**127**, 1380
—— Proof of partial-wave dispersion relations in perturbation theory—**126**, 1225
Nambu, Yoichiro and D. Lurié. Chirality conservation and soft pion production—**125**, 1429
—— **and E. Shrauner.** Soft pion emission induced by electromagnetic and weak interactions—**128**, 862
—— **and San Fu Tuan.** Magnetic field dependence of energy gap in superconductors—**128**, 2622
Naqvi, S. I. H. and B. G. Hogg. Some γ-ray cascades in Rh^{103}, Ce^{140}, and Dy^{160}—**128**, 357
Narath, Albert and Duane C. Wallace. Nuclear magnetic resonance in cubic sodium tungsten bronzes—**127**, 724
Nardelli, G. F. and N. Tettamanzi. Dynamics of cubic crystals with local change of mass—**126**, 1283
Nassau, K. (see Johnson, L. F.)—**126**, 1406
Nassiff, S. J. (see Biavati, M. H.)—**125**, 1364
Natali, S. V. (see Camerini, U.)—**128**, 362
Nath, N. (see Van Patter, D. M.)—**128**, 1246
Nathan, Marshall I. and J. C. Marinace. Phonon and polaron interaction in Ge-Ga arsenide tunnel heterojunctions—**128**, 2149
—— **and William Paul.** Effect of pressure on energy levels of impurities in semiconductors. II. Au in Si—**128**, 38
Nauenberg, M. and A. Pais. Woolly cusps—**126**, 360
—— (see Ball, J. S.)—**128**, 478
Nauenberg, U. (see Colley, D.)—**128**, 1930
Neamtan, S. M., G. Darewych, and G. Oczkowski. Annihilation of positrons from H^-e^+ ground state—**126**, 193
Neamu, I. (see Hulubei, H.)—**126**, 2174
Neely, H. H. (see Sosin, A.)—**127**, 1465
Neidhardt, W. Jim and Jack Fajans. Electrohydrodynamics of superfluid He in narrow channels—**128**, 495
Neidigh, R. V. (see Alexeff, I.)—**127**, 1
Nelkin, Mark. Phonon-phonon interactions in Bose systems—**127**, 979
Nelson, John W. and Emmett L. Hudspeth. Radiative proton capture in O^{18}—**125**, 301
——, **H. S. Plendl, and R. H. Davis.** (p,n) reaction thresholds in Ti^{48}, Fe^{56}, and Sr^{88}—**125**, 2005
Nelson, W. F., I. Siegel, and R. W. Wagner. K x-ray absorption spectra of Ge in crystalline and amorphous GeO_2—**127**, 2025
Nereson, N. G., C. E. Olsen, and G. P. Arnold. Neutron diffraction studies on EuO—**127**, 2101
—— (see Arnold, G.)—**126**, 2261(E)
Nervik, W. E. (see Hicks, H. G.)—**128**, 700
Nesbet, R. K. Theory of superconductivity. I. Electron-lattice interaction—**126**, 2014
—— Theory of superconductivity. II. Properties of modified electron-lattice states of low energy—**128**, 139
—— (see Freeman, A. J.)—**125**, 1978
Nessin, M., T. H. Kruse, and K. E. Eklund. Nuclear electric monopole transitions in O^{16}, Ca^{40}, Ge^{72}, and Zr^{90}—**125**, 639
Nethaway, David R. (see Wahl, Arthur C.)—**126**, 1112
Nettel, Stephen J. Many-particle theory of impurity states in polar crystals—**128**, 2573
—— (see Cooper, B. R.)—**127**, 57
Neufeld, Jacob. Electromagnetic properties of plasma-beam system—**127**, 346
Neumark, Gertrude F. Theory of anomalous photovoltaic effect of ZnS—**125**, 838
Neuzil, Edward F. (see Lindsay, Richard H.)—**127**, 1269
Newby, Neal D., Jr. Selection rules in odd-even shift of certain nuclear rotational bands—**125**, 2063
Newman, E. Proton transfers in N-B system at 27.5 MeV—**125**, 600
Newton, R. C. (see Kennedy, G. C.)—**126**, 1363
Neynaber, R. H. (see Rothe, Erhard W.)—**125**, 582; **126**, 598; **128**, 659
—— (see Smith, A. C. H.)—**127**, 1647
Niday, J. B. (see Hicks, H. G.)—**128**, 700
Nielsen, H. L. (see Gallagher, C. J., Jr.)—**126**, 1520
Niemela, L. Q. (see Boyarski, A. M.)—**128**, 2398
Nierenberg, William A. (see Cabezas, Amado Y.)—**126**, 1004
—— (see Chan, Yau Wa)—**127**, 572
—— (see Ehlers, V. J.)—**125**, 2008
Nilsen, W. G. (see Kurtz, S. K.)—**128**, 1586
Ninio, F. Field dependence of electric susceptibility of ionic crystals—**126**, 962
Nisenoff, M. and H. Y. Fan. Electron spin resonance in neutron-irradiated Si—**128**, 1605
Nishijima, K. Unitarity condition and anomalous vertex functions—**126**, 852
—— (see McCliment, E. R.)—**128**, 1970
Nishina, Yuichiro (see Kołodziejczak, Jerzy)—**128**, 2655
Nitsche, R. (see Fatuzzo, E.)—**125**, 514; **127**, 2036
Nobles, Ralph A. Long-range particles from nuclear fission—**126**, 1508
Nodvik, J. S., C. B. Duke, and M. A. Melkanoff. Optical model analysis of elastic proton scattering on C at intermediate energies—**125**, 975
Nogami, Yukihisa. Interpretation of ρ and ζ mesons—**128**, 2825
Nolle, A. W. (see Mahendroo, P. P.)—**126**, 125
Nomoto, M. Angular distribution of γ radiation following direct nuclear reaction—**127**, 1693
Nomura, K. C. (see Blakemore, J. S.)—**127**, 1024
Norbeck, E. (see Berkowitz, E.)—**128**, 247
Norberg, R. E. (see Luszczynski, K.)—**128**, 186
Nordberg, M. E., Jr., F. B. Morinigo, and C. A. Barnes. Comparison of the β-α angular correlations in Li^8 and B^8 β decays, and conserved vector current theory—**125**, 321
Northcliffe, L. C. (see Martin, F. W.)—**128**, 1166
Norton, Richard E. K^* and K meson pole contributions to leptonic Λ decay—**126**, 1216
—— (see Coleman, Sidney)—**125**, 1422
Nosanow, Lewis H. and Gordon L. Shaw. Hartree calculations for ground state of solid He and other noble gas crystals—**128**, 546

Novick, R. (see Holloway, W. W., Jr.)—**126**, 2109
—— (see Lurio, A.)—**126**, 1758
—— (see Thaddeus, P.)—**126**, 1774
Nowick, A. S. (see Dreyfus, R. W.)—**126**, 1367
Nowik, I. Influence of resonant absorber whose thickness varies linearly with time on special shape of incident Lorentzian wave packet—**126**, 1878
Noyes, H. Pierre (see Wong, David W.)—**126**, 1866
Nozières, Philippe and J. M. Luttinger. Derivation of Landau theory of Fermi liquids. I. Formal preliminaries—**127**, 1423
—— (see Luttinger, J. M.)—**127**, 1431
—— (see Miller, Allen)—**127**, 1452
—— (see Morel, Pierre)—**126**, 1909
Nurmia, M., P. Kauranen, and A. Siivola. Pm^{148}: new α activity—**127**, 943

Oades, G. C. (see Hamilton, J.)—**128**, 1881
Obenshain, Felix E. and Lorne A. Page. Strong electric field experiments on positronium in gases—**125**, 573
Obukhov, A. I. (see Goritchev, P. A.)—**126**, 2196
O'Connell, J. S., P. Tipler, and P. Axel. Elastic scattering of 11.5–17.7-MeV photons by Au measured with a bremsstrahlung monochromator—**126**, 228
Oczkowski, G. (see Neamtan, S. M.)—**126**, 193
Oehme, Reinhard (see Iizuka, Jugoro)—**126**, 787
Oertel, G. (see Griem, H. R.)—**125**, 177
Ogden, Philip M. (see Hinrichs, C. Keith)—**127**, 617
Ohlsen, W. D. and D. F. Holcomb. Low-temperature paramagnetic relaxation of color centers in KCl—**126**, 1953
Ohmura, Haruko and Takashi Ohmura. Coulomb energy of He^3 and charge distribution of nucleon—**128**, 729
Ohmura, Takashi (see Ohmura, Haruko)—**128**, 729
Okubo, Susumu (see Gotow, Kazuo)—**128**, 1921
Oliver, D. J. Electrical properties of *n*-type GaAs—**127**, 1045
Olsen, C. E. (see Nagle, D. E.)—**125**, 490
—— (see Nereson, N. G.)—**127**, 2101
Olsen, Haakon (see Maximon, L. C.)—**126**, 310
O'Malley, Thomas F., Leonard Rosenberg, and Larry Spruch. Low-energy scattering of charged particle by polarizable system—**125**, 1300
—— (see Hahn, Yukap)—**128**, 932
Onley, D. S. (see Griffy, T. A.)—**128**, 833
Opfer, J. E. (see Luszczynski, K.)—**128**, 186
Oppliger, L. (see Salisbury, S. R.)—**126**, 2143
Orbach, R. Spin-lattice relaxation time of Sm ethyl sulfate—**126**, 1349
—— (see Blume, M.)—**127**, 1587
O'Reilly, D. E. and Tung Tsang. Analysis of NMR line shapes by lattice harmonics—**128**, 2639
O'Sullivan, W. J. (see Simmons, W. W.)—**127**, 1168
Otter, F. A. and D. E. Mapother. Low-temperature heat capacity of superconducting alloy of Al—**125**, 1171
Overhauser, A. W. Spin density waves in electron gas—**128**, 1437
Overley, J. C. and Ward Whaling. Highly excited states in C^{11}. Elastic scattering of protons by B^{10}—**128**, 315
Overton, W. C., Jr. Correlation between electron gas bulk modulus and $c_{12}-c_{44}$ of monovalent metals—**127**, 1107
Owen, George E. (see Finlay, Roger W.)—**128**, 2309
Ozaki, S. (see Boyarski, A. M.)—**128**, 2398

Pack, J. L., R. E. Voshall, and A. V. Phelps. Drift velocities of slow electrons in Kr, Xe, D_2, CO, CO_2, water vapor, N_2O, and NH_3—**127**, 2084
Page, Lorne A. (see Obenshain, Felix E.)—**125**, 573
Pais, A. (see Nauenberg, M.)—**126**, 360
Pak, W. and K. Greisen. Nuclear interactions of high-energy cosmic rays observed near sea level—**125**, 1668
Palevsky, H. (see Chrien, R. E.)—**125**, 275; **127**, 1680
Palfrey, T. R. (see Liu, F. F.)—**128**, 2784
Palmer, D. W. (see Walters, W. L.)—**125**, 2012
Palsedge, John A. (see Boley, Forrest I.)—**126**, 734
Pankove, J. I. and P. Aigrain. Optical absorption of As-doped degenerate Ge—**126**, 956
Papazian, H. A. (see Jacobs, P. W. M.)—**127**, 1567
Pappas, A. C. (see Rudstam, G.)—**126**, 1852
Paranjape, B. V. and Benjamin U. Stewart. Role of *e-e* collisions in galvanomagnetic effects—**126**, 1668
Parikh, Jitendra C. Decay of electric current in superconductor—**128**, 1530
Parker, James H., Jr. (see Warren, Roger W.)—**128**, 2661
Parkinson, W. C. and J. R. Maxwell. Gross structure and 1*d*-shell nuclei—**126**, 1160
—— (see Green, J. A.)—**127**, 926
Parks, J. G. (see Blue, M. H.)—**125**, 1386
Parry, W. E. and R. E. Turner. Nonideal Bose gas at nonzero temperatures—**128**, 929
Passell, L. (see Dickinson, W. C.)—**126**, 632
Patrick, Lyle. Inequivalent sites and multiple donor and acceptor levels in SiC polytypes—**127**, 1878
—— (see Choyke, W. J.)—**127**, 1868
Patro, A. P. and B. Basu. Decay at Ag^{103}—**127**, 1258
Patterson, David A. Effects of oxygen and water vapor on "OH" absorption in melt-grown alkali halides—**127**, 1564
Paul, David I. Interaction of antiferromagnetic spin waves with Bloch wall—**126**, 78
—— Nuclear magnetic resonance within antiferromagnetic Bloch wall—**127**, 455
Paul, William (see Holland, M. G.)—**128**, 30; **128**, 43
—— (see Nathan, Marshall I.)—**128**, 38
Paxton, G. W. and R. G. Fowler. Theory of breakdown wave propagation—**128**, 993
Pearlstein, Edgar (see Phelps, Fred T., Jr.)—**128**, 1575
Pearson, J. J. Anisotropic superexchange in βMnS—**126**, 901
—— (see des Cloizeaux, Jacques)—**128**, 2131
Pearson, J. M. Induced pseudoscalar interaction and low-energy anomalies in β spectra—**126**, 1100
Peaslee, D. C. (see Carver, J. H.)—**127**, 2198
Peck, C. Clyde, Lawrence W. Jones, and Martin L. Perl. Evidence concerning pion-pion interactions below 765-MeV pion-pion resonance—**126**, 1836
Peck, R. A., Jr. (see Hassler, F. L.)—**125**, 1011
—— (see Iyengar, K. V. K.)—**125**, 1000
Pedrotti, F. L. and D. C. Reynolds. Spin-orbit splitting in CdS:Se single crystals—**127**, 1584
Peebles, P. J. Description of particles in quantized field theory—**128**, 1412
—— **and R. H. Dicke.** Cosmology and radioactive decay ages of terrestrial rocks and meteorites—**128**, 2006
—— **and R. H. Dicke.** Significance of spatial isotropy—**127**, 629
Pekeris, C. L. Excited *S* states of He—**127**, 509
—— $1\,^1S$, $2\,^1S$, and $2\,^3S$ states of H^- and of He—**126**, 1470
—— $1\,^1S$, $2\,^1S$, and $2\,^3S$ states of Li^+—**126**, 143
——, **B. Schiff, and H. Lifson.** Fine structure of $2\,^3P$ and $3\,^3P$ states of He—**126**, 1057
Pellam, John R. (see Koehler, Thomas R.)—**125**, 791
Penley, James C. Tunneling through thin films with traps—**128**, 596
Penn, David R. Wave-number dependent dielectric function of semiconductors—**128**, 2093
Pennebaker, W. B. (see Lindenfeld, P.)—**127**, 1881
Penner, S. (see Schrack, R. A.)—**127**, 1772
Penselin, S., T. Moran, V. W. Cohen, and G. Winkler. Hfs of electronic ground states of Rb^{85} and Rb^{87}—**127**, 524
—— (see Cohen, V. W.)—**127**, 517
Perel, Julius, Paula Englander, and Benjamin Bederson. Measurement of total cross sections for scattering of low-energy electrons by Li, Na, and K—**128**, 1148
Peres, Asher. Classical radiation recoil—**128**, 2471

Peressutti, G. (see Andreassi, G.)—**128**, 1425
Perez-Mendez, Victor (see Caris, John C.)—**126**, 295
—— (see Devlin, Thomas J.)—**125**, 690
Perfilov, N. A. (see Goritchev, P. A.)—**126**, 2196
Perkins, J. F. Monte Carlo calculation of transport of fast electrons—**126**, 1781
Perkins, Walton A. (see Caris, John C.)—**126**, 295
Perl, Martin L. (see Peck, C. Clyde)—**126**, 1836
Perlman, I., F. Asaro, A. Ghiorso, A. Larsh, and R. Latimer. Isomeric state of Po^{212}—**127**, 917
—— (see Gilmore, John)—**128**, 2276
Perlow, G. J. (see Johnson, C. E.)—**126**, 1503
Perrin, R. (see Rose, M. E.)—**128**, 1776
Pershan, P. S. (see Armstrong, J. A.)—**127**, 1918
—— (see Bloembergen, N.)—**128**, 606
Peshkin, Murray and W. Tobocman. Flux quantization and time-reversal degeneracy—**127**, 1865
—— (see Lipkin, H. J.)—**126**, 116
Peter, M., D. Shaltiel, J. H. Wernick, H. J. Williams, J. B. Mock, and R. C. Sherwood. Paramagnetic resonance of *S*-state ions in metals—**126**, 1395
—— (see Clogston, A. M.)—**125**, 541
Petersen, F. Russell and Howard A. Shugart. Nuclear spin, hfs, and nuclear moments of 6.8-day Lu^{177}—**126**, 252
—— **and Howard A. Shugart.** Nuclear spin, hfs, and nuclear moments of 64-hr Y^{90}—**125**, 284
—— **and Howard A. Shugart.** Nuclear spins, hyperfine structures, and nuclear moments of Sc^{46} and Y^{91}—**128**, 1740
Peterson, G. A. and W. C. Barber. Deuteron magnetic dipole disintegration by 180° electron scattering—**128**, 812
—— (see Edge, R. D.)—**128**, 2750
Peterson, J. M. Neutron giant resonances—nuclear Ramsauer effect—**125**, 955
Peterson, Robert L. (see Schieve, William C.)—**126**, 1458
Peterson, T. J., Jr., and D. H. Tomboulian. Low-energy continuous x-ray spectrum in the 80 A to 180 A region—**125**, 235
Petravić, M. (see Ilakovac, K.)—**128**, 2739
Pettit, G. D. (see Sorokin, P. P.)—**127**, 503
—— (see Title, R. S.)—**128**, 62
Petty, R. L. (see Pretzel, F. E.)—**127**, 777
Phelps, A. V. (see Chanin, L. M.)—**128**, 219
—— (see Frost, L. S.)—**127**, 1621
—— (see Pack, J. L.)—**127**, 2084
Phelps, Fred T., Jr., and Edgar Pearlstein. Measurement of stored energy in x-rayed NaCl—**128**, 1575
Philipp, H. R., W. C. Dash, and H. Ehrenreich. Piezoreflectance in Ge—**127**, 762
—— **and E. A. Taft.** Optical properties of diamond in vacuum uv—**127**, 159
—— (see Ehrenreich, H.)—**128**, 1622
Phillips, James C. Band structure of semiconductors—**125**, 1931
—— **and Leonard Kleinman.** Crystal potential and energy bands of semiconductors. IV. Exchange and correlation—**128**, 2098
—— (see Kleinman, L.)—**125**, 819
Phillipson, P. E. Repulsive interaction between two ground-state He atoms—**125**, 1981
Phipps, T. E. (see Belford, Geneva G.)—**128**, 524
Pickup, E., D. K. Robinson, and E. O. Salant. p-p interactions at 2 BeV. II. Multiple pion production—**125**, 2091
—— (see Fickinger, W. J.)—**125**, 2082
Pierson, William R., Henry C. Griffin, and Charles D. Coryell. Characterization of Ru^{107}, Ru^{108}, Rh^{107}, and Rh^{108}—**127**, 1708
Pine, J. (see Yount, D.)—**128**, 1842
Pines, David and J. Robert Schrieffer. Approach to equilibrium of electons, plasmons, and phonons in quantum and classical plasmas—**125**, 804
—— (see Miller, Allen)—**127**, 1452
—— (see Wyld, H. W., Jr.)—**127**, 1851
Pipkin, F. M. and R. H. Lambert. Hyperfine splittings of H and T. II—**127**, 787
—— (see Lambert, R. H.)—**128**, 198
Piroué, P. A. (see Fitch, V. L.)—**126**, 1849
Pisent, G. (see Demanins, F.)—**125**, 318
Plano, R. J. (see Colley, D.)—**128**, 1930
—— (see Samios, N. P.)—**126**, 1844
Platzman, P. M. Ground-state energy of bound polarons—**125**, 1961
—— **and S. J. Buchsbaum.** Wave propagation along magnetic field in warm plasma—**128**, 1004
—— (see Feynman, R. P.)—**127**, 1004
—— (see Hellwarth, R. W.)—**128**, 1599
Plendl, H. S. (see Nelson, J. W.)—**125**, 2005
Plendl, Johannes N. and Peter J. Gielisse. Hardness of nonmetallic solids on atomic basis—**125**, 828
Poeverlein, H. Sommerfeld-Runge law in three and four dimensions—**128**, 956
Poiani, G. (see Demanins, F.)—**125**, 318
Poirier, John A. (see Hinrichs, C. Keith)—**127**, 617
Polkinghorne, J. C. Anomalous thresholds in unitary theories—**128**, 2898
—— Complex angular momenta and unitarity in crossed channels—**128**, 2459
Pollack, S. R. and K. R. Atkins. Specific heat of ferrites at liquid He temperatures—**125**, 1248
Pomerantz, M. (see Das, T. P.)—**125**, 2208(E)
Pool, M. L. (see Bhat, M. R.)—**127**, 1704
Poppe, C. H. (see Lefevre, H. W.)—**128**, 1328
Porile, Norbert T. Simple nuclear reactions of Ga^{69} and Ga^{71} with high-energy protons—**125**, 1379
—— Simple nuclear reactions of In with 30- and 2.9-GeV protons—**128**, 1916
—— Study of $Al^{27}(\alpha,Be^7)Na^{24}$ reaction from threshold to 41 MeV—**127**, 224
——, **A. M. Poskanzer, and M. Rho.** Recoil studies of reactions of In with medium energy protons and α particles—**128**, 242
Poskanzer, A. M. (see Cumming, J. B.)—**127**, 950; **128**, 2392
—— (see Porile, N. T.)—**128**, 242
Postma, Hans, H. Marshak, V. L. Sailor, F. J. Shore, and C. A. Reynolds. Transmission of polarized neutrons through samples of polarized Ho^{165} nuclei—**126**, 979
—— (see Marshak, H.)—**128**, 1287
—— (see Sailor, V.)—**127**, 1124
Poularikas, A. (see Bramlitt, E. T.)—**125**, 297
Powell, W. M. (see Camerini, U.)—**128**, 362
Powers, D. and W. Whaling. Range of heavy ions in solids—**126**, 61
Pratt, R. H. (see Drell, S. D.)—**125**, 1394
Preiss, Ivor L. (see Ladenbauer-Bellis, Inge-Maria)—**125**, 606
Prener, J. S. (see Kingsley, J. D.)—**126**, 458
Preston, R. L. (see Martin, H. J., Jr.)—**125**, 942
Preston, R. S., S. S. Hanna, and J. Heberle. Mössbauer effect in metallic Fe—**128**, 2207
Pretzel, F. E. and R. L. Petty. X-ray study of interstitial defects in radiation-damaged alkali halides and LiH—**127**, 777
Pretzer, Donavon (see Dunn, Gordon H.)—**128**, 2200
Primak, W. and E. Edwards. Radiation-induced dilatations in vitreous silica—**128**, 2580
Primakoff, H. (see Dreitlein, J.)—**125**, 1671; **126**, 375
Prodell, A. (see Samios, N. P.)—**126**, 1844
Prosser, F. W., Jr., W. P. Unruh, B. H. Wildenthal, and R. W. Krone. γ radiation from proton capture in Na^{23}—**125**, 594
Prosser, John M. (see John, Walter)—**127**, 231
Provotorov, B. N. Theory of double magnetic resonance in solids—**128**, 75

Prowse, D. J. (see Helmy, E.)—**127**, 254
Pu, Robert (see Mittleman, M. H.)—**126**, 370
Puri, S. P. (see Kent, D. W.)—**125**, 331
Püschel, W. (see Tietge, J.)—**127**, 1324
Pyatt, K. D., Jr. (see Breit, G.)—**128**, 826

Querzoli, R. (see Mencuccini, C.)—**126**, 1181
Quinn, John J. Range of excited electrons in metals—**126**, 1453
—— **and Sergio Rodriguez.** Electrodynamic properties of quantum plasma in uniform magnetic field—**128**, 2487
—— **and Sergio Rodriguez.** Quantum effects in ultrasonic attenuation in metals in magnetic field—**128**, 2494

Rabin, Herbert and James H. Schulman. Color centers in CsCl-type alkali halides—**125**, 1584
Radford, H. E. Microwave Zeeman effect of free hydroxyl radicals: $^2\Pi_i$ levels—**126**, 1035
—— **and H. P. Broida.** Rotational perturbations in CN: zero-field theory, optical Zeeman effect, and microwave transition probabilities—**128**, 231
Rado, George T. Statistical theory of magnetoelectric effects in antiferromagnetics—**128**, 2546
Radvanyi, Pierre, Jeannine Genin, and Claude Detraz. Separation of final states of residual nucleus in pickup reaction $C^{13}(p,d)C^{11}$ at 154 MeV—**125**, 295
Raether, M. (see Chen, C. L.)—**128**, 2679
Rafiqullah, A. K. α decay of nonaxial nuclei—**127**, 905
Rahman, A., K. S. Singwi, and A. Sjölander. Stochastic model of liquid and cold neutron scattering. II—**126**, 997
——, **K. S. Singwi, and A. Sjölander.** Theory of slow neutron scattering by liquids. I.—**126**, 986
Rainwater, J. (see Frati, W.)—**128**, 2360
Rajdev, Dilip and D. H. Whitmore. Debye temperature for Cd derived from low-temperature specific heat measurements—**128**, 1030
Rakavy, G. (see Many, A.)—**126**, 1980
Rakavy, M. (see Burde, J.)—**128**, 325
Ramsey, Norman F. (see Fox, Raymond)—**125**, 1609
—— (see Kleppner, Daniel)—**126**, 603
Randall, C. M. (see Ban, N. T.)—**128**, 6
Randolph, P. D. (see Schmunk, R. E.)—**128**, 562
—— (see Strong, K. A.)—**125**, 933
Rangan, L. K., Gale I. Harris, and L. W. Seagondollar. Properties of two states in Ca^{40} near 9.87 MeV—**127**, 2180
Rao, K. R. (see Brockhouse, B. N.)—**128**, 1099
Raymund, M. (see Davis, D. H.)—**127**, 605
Rayne, John A. and B. S. Chandrasekhar. Fermi surface of In from magnetoacoustic measurements—**125**, 1952
—— (see Veal, Boyd W.)—**128**, 551
Raz, B. J. (see Macfarlane, M. H.)—**127**, 204
Razavy, M., G. Field, and J. S. Levinger. Analytical solutions for velocity-dependent nuclear potentials—**125**, 269
Read, Jaques B. J., Inge-Maria Ladenbauer-Bellis, and Richard Wolfgang. Compound nucleus formation mechanisms in raction of heavy ions with medium mass elements—**127**, 1722
Reber, L. H. (see Hamburger, E. W.)—**128**, 333
—— (see Isoya, A.)—**128**, 806
Reddoch, A. H. and G. J. Ritter. Nuclear magnetic resonance of Lu^{175}—**126**, 1493
Redfield, Alfred G. Statistical theory of spin resonance saturation—**128**, 2251
—— (see Masuda, Yoshika)—**125**, 159
Redlich, Martin G. Matrix elements of n-p interaction and odd-group model for heavy nucleus—**127**, 555
Reed, W. A. and J. A. Marcus. Topology of Fermi surface of Ga—**126**, 1298
Reese, W. (see Anderson, A. C.)—**127**, 671
Reese, W. E. (see Turner, W. J.)—**127**, 126
Refsdal, Sjur. Rate difference between clock in artificial satellite and clock on earth—**127**, 977
Reich, C. W., R. P. Schuman, J. R. Berreth, M. K. Brice, and R. L. Heath. Radioactive decay of Pm^{148} and Pm^{148m}—**127**, 192
Reik, H. O. and H. Risken. Drift velocity and anisotropy of hot electrons in n Ge—**126**, 1737
Reinberg, A. R. (see Marshall, S. A.)—**125**, 453
Reines, F. (see Giamati, C. C.)—**126**, 2178
Reiss, J. R. (see Forman, R.)—**128**, 1493
Remeika, J. P. (see Geschwind, S.)—**126**, 1684
Rexroad, Harvey N. and Walter Gordy. Electron spin resonance of free radicals produced by γ irradiation of various substances at 4.2°K—**125**, 242
Reynolds, C. A. (see Marshak, H.)—**128**, 1287
—— (see Postma, Hans)—**126**, 979
—— (see Sailor, V. L.)—**127**, 1124
Reynolds, D. C. (see Litton, C. W.)—**125**, 516
—— (see Pedrotti, F. L.)—**127**, 1584
Reynolds, H. L. (see Kerlee, D. D.)—**127**, 1224
Reynolds, J. T. (see Griffy, T. A.)—**128**, 833
Rho, M. (see Porile, N. T.)—**128**, 242
Rice, Stuart A. (see Meyer, L.)—**126**, 1927
Richards, H. T. (see Salisbury, S. R.)—**126**, 2147
Richards, P. L. Magnetic field dependence of surface impedance of superconducting Sn at 3 kMc/sec—**126**, 912
Richardson, J. Reginald (see Catura, Richard C.)—**126**, 646
Riedl, H. R. Free-carrier absorption in p-type PbTe—**127**, 162
Rimai, L. and G. A. deMars. Electron paramagnetic resonance of trivalent Gd ions in strontium and barium titanates—**127**, 702
Risken, H. (see Reik, H. O.)—**126**, 1737
Ristinen, R. A. (see Wilson, R. R.)—**125**, 1655
Ritchie, R. H. and H. B. Eldridge. Optical emission from irradiated foils. I—**126**, 1935
Ritson, D. M. (see Boyarski, A. M.)—**128**, 2398
Ritter, George J. Ground-state hfs and nuclear magnetic moment of Tm^{169}—**128**, 2238
—— Hfs and nuclear moments of Lu^{175}—**126**, 240
—— (see Reddoch, A. H.)—**126**, 1493
Ritter, J. C. and W. G. Smith. Decay of At^{212}; $Bi^{209}(\alpha,n)At^{212}$ reaction—**128**, 1778
Ritter, R. C., P. H. Stelson, F. K. McGowan, and R. L. Robinson. Coulomb excitation with Ne^{20} ions—**128**, 2320
Roach, Pat R. (see Lounasmaa, O. V.)—**128**, 622
Robbins, C. R. (see Fang, P. H.)—**126**, 892
Roberts, Edwin M. Exact integral relationship in quantum mechanics. Application to variational method—**128**, 1381
Robertson, W. W. (see Benton, E. E.)—**128**, 206
Robinson, D. K. (see Pickup, E.)—**125**, 2091
—— (see Fickinger, W. J.)—**125**, 2082
Robinson, Ivor (see Bergmann, Peter G.)—**126**, 1227
Robinson, John (see Bassani, Franco)—**127**, 1969
Robinson, R. L., Noah R. Johnson, and E. Eichler. Decay of Cs^{132}—**128**, 252
——, **F. K. McGowan, and P. H. Stelson.** Coulomb excitation of levels in Se^{77}—**125**, 1373
—— (see Ritter, R. C.)—**128**, 2320
Robinson, W. A. (see Simmons, W. W.)—**127**, 1168
Rockmore, Ronald M. Spin susceptibility of normal fermion systems—**125**, 1778
Rodbell, D. S. (see Bean, C. P.)—**126**, 104
Rodriguez, Sergio (see Ascarelli, G.)—**127**, 167
—— (see Quinn, John J.)—**128**, 2487; **128**, 2494
Roetschi, H. (see Fatuzzo, E.)—**125**, 514; **127**, 2036
Rojo, O. and L. M. Simmons. Velocity-dependent nuclear potentials for singlet-even states—**125**, 273
Rol, P. K. (see Rothe, Erhard W.)—**126**, 598; **128**, 659

Roothaan, C. C. J. (see Clementi, E.)—**127**, 1618
Rorschach, H. E. (see Bloch, F.)—**128**, 1697
Rose, F. E., M. T. Taylor, and R. Bowers. Low-frequency magneto-plasma resonances in Na—**127**, 1122
Rose, M. E., R. Perrin, and L. L. Foldy. β-γ emission through virtual states—**128**, 1776
—— (see Bhalla, C. P.)—**128**, 774
Rosen, Gerald. Stability of graviton against radiative decay —**128**, 449
Rosen, L. and L. Stewart. Neutron-induced disintegrations of Li^6 and Li^7—**126**, 1150
—— (see Stewart, Leona)—**128**, 707
Rosenbaum, M. (see Aamodt, R.)—**126**, 1165
Rosenberg, Leonard and Larry Spruch. Minimum principle for multichannel scattering—**125**, 1407
—— (see O'Malley, Thomas F.)—**125**, 1300
Rosenblum, Bruce (see Duncan, Robert C., Jr.)—**125**, 484
—— (see Michel, R. E.)—**128**, 1646
Rosendorff, S. and S. Tani. High-energy potential scattering —**128**, 457
Rosenfeld, Arthur H. (see Button, Janice)—**126**, 1858
—— (see Stevenson, M. L.)—**125**, 687; **125**, 2208(E)
Ross, John S. and Kiyoshi Murakawa. Nuclear quadrupole moment of Yb^{173}—**128**, 1159
—— (see Hines, Arthella P.)—**126**, 2105
Ross, Marc H. (see Shaw, Gordon L.)—**126**, 806; **126**, 814
Ross, Ronald R. (see Humphrey, William E.)—**127**, 1305
Rost, E. Analysis of inelastic scattering of α particles. II—**128**, 2708
—— (see Austern, N.)—**128**, 733
—— (see Bassel, R. H.)—**128**, 2693
Rostoker, Norman and Alan C. Kolb. Fission of hot plasma —**125**, 2208(E)
Rothe, Erhard W., Lawrence L. Marino, R. H. Neynaber, P. K. Rol, and S. M. Trujillo. Scattering of thermal rare gas beams by Ar. Influence of long-range dispersion forces —**126**, 598
——, **Lawrence L. Marino, R. H. Neynaber, and S. M. Trujillo.** Electron impact ionization of atomic H and atomic O—**125**, 582
——, **P. K. Rol, S. M. Trujillo, and R. H. Neynaber.** Velocity dependence of total cross section for scattering of Li and K by Xe—**128**, 659
—— (see Smith, A. C. H.)—**127**, 1647
Rothman, M. A. (see Van Patter, D. M.)—**128**, 1246
Rout, V. M. and W. M. Jones. $Li^6(d,p_1)Li^{7*}$ reaction at 2-MeV bombarding energy—**128**, 263
Rowland, T. J. Knight shift in Ag base solid solutions—**125**, 459
Roy, R. R. (see Sandhu, H. S.)—**125**, 1017
Rozics, J. D. (see Johnson, W. R.)—**128**, 192
Ruby, R. H., H. Benoit, and C. D. Jeffries. Paramagnet resonance below 1°K: spin-lattice relaxation of Ce^{3+} and Nd^{3+} in lanthanum magnesium nitrate—**127**, 51
Ruby, S. L. (see Maradudin, A. A.)—**126**, 9
—— (see Shirane, G.)—**125**, 1158; **126**, 49
Ruderman, Malvin A. Upper limits for coupling constants in field theories—**127**, 312
—— (see Cornwall, John M.)—**128**, 1474
Rudstam, G., E. Bruninx, and A. C. Pappas. Spallation of Cu with 24-GeV protons—**126**, 1852
Rupp, L. W., Jr. (see Walsh, W. M., Jr.)—**126**, 952
Ruppel, H. M. (see Breit, G.)—**127**, 2123; **128**, 826
—— (see Hull, M. H., Jr.)—**128**, 830
—— (see Lassila, K. E.)—**126**, 881
Ruppel, W. (see Fatuzzo, E.)—**127**, 2036
Rupprecht, G. and R. O. Bell. Microwave losses in $SrTiO_3$ above phase transition—**125**, 1915
Rusk, James R. and Walter Gordy. Millimeter wave molecular beam spectroscopy: alkali bromides and iodides—**127**, 817
Russek, Arnold, Charles H. Sherman, and David E. Flinchbaugh. Simple, analytic, atomic wave functions—**126**, 573
—— (see Fenton, David G.)—**127**, 1212
Russell, J. E. Nonradiative $E2$ transitions in μ-mesonic atoms —**127**, 245
Rustgi, M. L. (see Mathur, V. S.)—**127**, 1663

Sabisky, Edward S. (see Gerritsen, Hendrik J.)—**125**, 1853
Sachs, R. Asymptotic symmetries in gravitational theory—**128**, 2851
Sachs, R. G. High-energy behavior of nucleon electromagnetic form factors—**126**, 2256
Sacton, J. (see Jones, B. D.)—**127**, 236
Sadasiv, G. Magnetoresistance in Ge in impurity conduction range—**128**, 1131
Sáenz, Albert W. Spin waves in exchange-coupled complex magnetic structures and neutron scattering—**125**, 1940
Sagalyn, Paul L. and J. Anton Hofmann. Nuclear magnetic resonance in metallic single crystal—**127**, 68
—— (see Harrison, Ralph, J.)—**128**, 1630
Sailor, V. L., R. I. Schermer, F. J. Shore, C. A. Reynolds, H. Marshak, and Hans Postma. Nuclear polarization in polycrystalline Ho-In alloy—**127**, 1124
—— (see Marshak, H.)—**128**, 1287
—— (see Postma, Hans)—**126**, 979
Sakita, Bunji. Low-energy limit of photodisintegration of deuteron—**127**, 1800
—— **and Charles J. Goebel.** Application of dispersion relations to photodisintegration of deuteron—**127**, 1787
Sakurai, J. J. (see Arnold, R. C.)—**128**, 2808
Salam, Abdus. Renormalizability of gauge theories—**127**, 337
—— (see Goldstone, Jeffrey)—**127**, 965
Salant, E. O. (see Fickinger, W. J.)—**125**, 2082
—— (see Pickup, E.)—**125**, 2091
Salem, L. Quantum-mechanical sum-rule for infinite sums involving operator $\partial H/\partial\lambda$—**125**, 1788
Salisbury, S. R., G. Hardie, L. Oppliger, and R. Dangle. p-O^{16} differential scattering cross sections. II—**126**, 2143
—— **and H. T. Richards.** F^{17} level parameters—**126**, 2147
Salpeter, E. E. and M. H. Zaidi. Lamb shift excitation energy in ground state of He atom—**125**, 248
Salvini, G. (see Mencuccini, C.)—**126**, 1181
Salzman, Freda and George Salzman. Single virtual particle exchange model of high-energy inelastic glancing collisions—**125**, 1703
Salzman, George (see Salzman, Freda)—**125**, 1703
Samelson, H. and A. Lempicki. Fluorescence of cubic ZnS:Cl crystals—**125**, 901
Samios, N. P., R. Plano, A. Prodell, M. Schwartz, and J. Steinberger. Parity of neutral pion and decay $\pi^0 \to 2e^+ + 2e^-$—**126**, 1844
Sampson, M. B. (see Bingham, F. W.)—**128**, 1796
—— (see Martin, H. J., Jr.)—**125**, 942
Sanders, W. T. Peierls stress for idealized crystal model—**128**, 1540
Sandhu, H. S., E. H. Webb, R. C. Mohanty, and R. R. Roy. Experiments on pair and triplet production by 5–90 MeV x rays—**125**, 1017
Sanjeevaiah, B. (see Jones, B. D.)—**127**, 236
Santos Ocampo, A. G. and D. C. Conway. L/K-capture ratio of Zn^{65}—**128**, 258
Saraf, Babulal (see Sharma, R. P.)—**125**, 2071
Sartori, L. (see Fried, David L.)—**128**, 2879
Sasaki, T. and K. Ishiguro. Optical constants of Si in extreme uv region—**127**, 1091
Satchler, G. R. (see Austern, N.)—**128**, 733
—— (see Bassel, R. H.)—**128**, 2693
—— (see Ilakovac, K.)—**128**, 2739
Sato, Hiroshi and Robert S. Toth. Long-period superlattices in alloys. II—**127**, 469

Sato, Iwao. Field-theoretical calculation of one-pion-exchange and two-pion-exchange contributions to phase shifts with higher angular momenta for nucleon-nucleon scattering—**127**, 1352; **128**, 2925(E)
Satten, R. A. (see Asawa, C. K.)—**127**, 1542
Satterthwaite, C. B. Thermal conductivity of normal and superconducting Al—**125**, 873
Sattler, Allan R. Decay of Sr^{85}—**127**, 854
Saunders, Edward M. Ground state of solid He^3—**126**, 1724
Savage, Albert (see Miller, Robert C.)—**128**, 2175
Sawada, Katuro (see Iwamoto, Fumiaki)—**126**, 887
Sawicki, J. Higher random phase approximation and energy spectra of spherical nuclei—**126**, 2231
Sawyer, R. F. Symmetry model for new resonances—**128**, 988
—— (see Lee, B. W.)—**127**, 2266; **127**, 2274
Saxena, A. N. High-energy interference effect of bremsstrahlung production in single crystal of Si—**125**, 1720
Scanlon, W. W. Precipitation of Te and Pb in PbTe crystals—**126**, 509
Scardefield, J. E. (see Title, R. S.)—**128**, 62
Scarsi, Livio (see Linsley, John)—**128**, 2384
Schearer, L. D. Energy shifts of magnetic sublevels of $^3S_1$ He caused by optical pumping—**127**, 512
Schermer, R. I. (see Sailor, V. L.)—**127**, 1124
Scherr, Charles W., J. N. Silverman, and F. A. Matsen. Perturbation energy coefficients and ionization potentials of ground state of three- to ten-electron isoelectronic atomic series—**127**, 830
—— (see Knight, Robert E.)—**128**, 2675
Schey, Harry M. (see Burke, Philip)—**126**, 147; **126**, 163
Schieber, M. (see Aharoni, A.)—**127**, 439
Schieve, William C. and Robert L. Peterson. Correlation function calculation of thermal conductivity—**126**, 1458
Schiff, B. (see Pekeris, C. L.)—**126**, 1057
Schiff, L. I. Particle theory approach to two-pion and three-pion systems—**125**, 777
Schiller, Ralph. Quasi-classical theory of nonspinning electron—**125**, 1100
—— Quasi-classical theory of relativistic spinning electron—**128**, 1402
—— Quasi-classical theory of spinning electron—**125**, 1116
—— Quasi-classical transformation theory—**125**, 1109
—— **and Melvin Schwartz.** Structure-independent electrodynamics in electric dipole approximation—**126**, 1582
Schillinger, Walter (see Koenig, Seymour H.)—**128**, 1668
Schindler, A. I. (see Smith, R. J.)—**127**, 179
Schluter, R. A. (see Cool, R. L.)—**127**, 2223
Schmidt, F. H. (see Lieber, A. J.)—**126**, 1496
Schmidt, George and David Finkelstein. Magnetically confined plasma with Maxwellian core—**126**, 1611
Schmidt, V. Hugo and Edwin A. Uehling. Random motion of deuterons in KD_2PO_4—**126**, 447
Schmit, J. L. (see Lutes, O. S.)—**125**, 433
Schmunk, R. E., R. M. Brugger, P. D. Randolph, and K. A. Strong. Lattice dynamics of Be—**128**, 562
Schneider, Franz. Recoil model in quantum field theory—**125**, 2130
Schneider, Werner (see Matthias, Eckart)—**125**, 261
Schnitzer, Howard J. Pion-pion scattering and low-energy pion production—**125**, 1059
—— (see Hatsukade, Shigeo)—**128**, 468
Schnopper, H. W. (see Watanabe, Takeshi)—**127**, 2055
Schrack, R. A., J. E. Leiss, and S. Penner. Neutral meson photoproduction from complex nuclei—**127**, 1772
Schrank, G., E. K. Warburton, and W. W. Daehnick. Inelastic scattering of 17-MeV protons from Be^9, B^{10}, Ne^{20}, Mg^{25}, and Mg^{26}—**127**, 2159
Schrieffer, J. Robert (see Bassani, Franco)—**127**, 1969
—— (see Pines, David)—**125**, 804
Schrils, R. (see Downs, B. W.)—**127**, 1388
Schröder, Klaus. Specific heat of Cr-Fe alloys from ~140 to 350°K—**125**, 1209
Schücking, Engelbert (see Bergmann, Peter G.)—**126**, 1227
Schulman, James H. (see Rabin, Herbert)—**125**, 1584
Schulz, G. J. Cross sections and electron affinity for O^- ions from O_2, CO, and CO_2 by electron impact—**128**, 178
—— Vibrational excitation of N_2 by electron impact—**125**, 229
—— **and J. T. Dowell.** Excitation of vibrational and electronic levels in O_2 by electron impact—**128**, 174
Schumacher, David P. Polymorphic transition in LiH—**126**, 1679
Schumacher, R. T. and J. L. Hall. Polarization of Li nuclei in irradiated LiH—**125**, 428
—— (see Hall, J. L.)—**127**, 1892
Schuman, R. P. (see Reich, C. W.)—**127**, 192
Schupp, A. A. (see Ware, A. A.)—**125**, 417
Schwartz, Charles. Ground state of He atom—**128**, 1146
—— Importance of angular correlations between atomic electrons—**126**, 1015
Schwartz, Joseph (see Kirz, Janos)—**126**, 763
Schwartz, M. (see Samios, N. P.)—**126**, 1844
Schwartz, Melvin (see Schiller, Ralph)—**126**, 1582
Schweitzer, Donald G. Activation energy for annealing single interstitials in neutron-irradiated graphite and absolute rate of formation of displaced atoms—**128**, 556
Schwerdtfeger, C. F., E. G. Funk, Jr., and J. W. Mihelich. Decay of Pm^{148}, Pm^{148m}, and Eu^{148}—**125**, 1641
Schwinger, Julian. Gauge invariance and mass—**125**, 397
—— Gauge invariance and mass. II—**128**, 2425
—— Non-Abelian gauge fields. Commutation relations—**125**, 1043
—— Non-Abelian gauge fields. Relativistic invariance—**127**, 324
Scintei, N. (see Hulubei, H.)—**126**, 2174
Scott, P. L. and C. D. Jeffries. Spin-lattice relaxation in some rare earth salts at He temperatures; observation of phonon bottleneck—**127**, 32
Scott-Monck, J. (see Flicker, H.)—**128**, 2557
Seaborg, Glenn T. (see Thomas, T. Darrah)—**126**, 1805
Seagondollar, L. W. (see Harris, Gale I.)—**128**, 338
—— (see Rangan, L. K.)—**127**, 2180
Seeger, P. A. (see Bardin, R. K.)—**127**, 583
Seevers, D. O. (see Korringa, Jan)—**127**, 1143
Segall, Benjamin. Fermi surface and energy bands of Cu—**125**, 109
——, **G. W. Ludwig, H. H. Woodbury, and P. D. Johnson.** Electron spin resonance of center in Ca fluorophosphate—**128**, 76
Segel, R. E. (see Fiebiger, N. F.)—**125**, 2031
Segnan, R. (see Jha, S.)—**128**, 1160
Sehgal, M. L. Decay of Sb^{115}—**125**, 968
—— Isomeric cross-section ratios in (n,γ) reactions—**128**, 761
—— (see der Mateosian, E.)—**125**, 1615
Seiden, P. E. Relaxation equations for two-magnon and magnon-phonon processes in ferrimagnetic resonance—**125**, 2208(E)
Seki, H. Film flow of liquid He at low-pressure heads—**128**, 502
Sellberg, F. (see Agdur, B.)—**128**, 1
Selleri, Franco (see Amaldi, Ugo, Jr.)—**128**, 2772
Sellschop, J. P. F. (see Mouton, W. L.)—**128**, 2745
Seman, M. L. and Lewis M. Branscomb. Structure and photodetachment spectrum of atomic C negative ion—**125**, 1602
Sen, P. Two-component first-order wave equations—**128**, 2476
Senitzky, I. R. Incoherence, quantum fluctuations, and noise—**128**, 2864
—— Induced and spontaneous emission in coherent field. V. Theory of molecular beam amplification—**127**, 1638
Seppi, E. J. and F. Boehm. Nuclear resonance excitation using diffraction monochromator—**128**, 2334

Serin, B. (see Gayley, R. I., Jr.)—**126**, 43
Sette, D. and F. Wanderlingh. Nucleation by cosmic rays in ultrasonic cavitation—**125**, 409
Seward, F. D. Resonant scattering of γ rays from nuclear levels with linear accelerator—**125**, 335
Shaffer, R. A. Radiative corrections to decay processes mediated by vector bosons—**128**, 1452
Shafroth, S. M. (see Van Patter, D. M.)—**128**, 1246
Shaltiel, D. (see Peter, M.)—**126**, 1395
Sham, L. J. (see Austin, B. J.)—**127**, 276
Shamu, R. E. (see Austin, S. M.)—**126**, 1532
Shand, J. B. (see Stewart, A. T.)—**128**, 118
Shapiro, G. and L. M. Lederman. Fundamental constants of muon—**125**, 1022
Sharma, R. P., S. H. Devare, and Babulal Saraf. β spectra of Nd^{147}—**125**, 2071
Sharma, R. R. (see Khubchandani, P. G.)—**126**, 594
Sharp, David H. (see Baierlein, Ralph F.)—**126**, 1864
—— (see Blair, J. S.)—**125**, 1625
—— (see Wagner, William G.)—**128**, 2899
Shaw, Gordon L. and Marc H. Ross. Analysis of multichannel reactions—**126**, 806
—— **and Marc H. Ross.** Effective range analysis of *S*-wave K^-p reactions—**126**, 814
—— (see Nosanow, Lewis H.)—**128**, 546
Shen, C. S. (see Griem, H. R.)—**125**, 196
Shephard, W. D. and W. D. Walker. π^--p interaction at 1.3 BeV—**126**, 278
—— (see Kenney, V. P.)—**126**, 736
Sherman, Charles H. (see Russek, Arnold)—**126**, 573
Sherwood, R. C. (see Clogston, A. M.)—**125**, 541
—— (see Peter, M.)—**126**, 1395
—— (see White, J. A.)—**128**, 581
Shimony, Abner (see Lebowitz, Joel L.)—**128**, 1945
Shirane, G., D. E. Cox and S. L. Ruby. Mössbauer study of isomer shift, quadrupole interaction, and hyperfine field in several oxides containing Fe^{57}—**125**, 1158
——, **W. J. Takei, and S. L. Ruby.** Mössbauer study of hyperfine fields and isomer shifts in Fe_4N and $(Fe,Ni)_4N$—**126**, 49
—— (see Takei, W. J.)—**125**, 1893
Shiren, N. S. Measurement of signal velocity in region of resonant absorption by ultrasonic paramagnetic resonance—**128**, 2103
Shirley, D. A., M. Kaplan, R. W. Grant, and D. A. Keller. Mössbauer effect in Eu^{151}; possible influence of optical branches—**127**, 2097
—— (see Judd, B. R.)—**128**, 1733
Shockley, W. Diffusion and drift of minority carriers in semiconductors for comparable capture and scattering mean free paths—**125**, 1570
Shore, F. J. (see Marshak, H.)—**128**, 1287
—— (see Postma, Hans)—**126**, 979
—— (see Sailor, V. L.)—**127**, 1124
Shrauner, E. (see Nambu, Y.)—**128**, 862
Shtrikman, S. (see Brown, William Fuller, Jr.)—**125**, 825
Shugart, Howard A. (see Chan, Yau Wa)—**127**, 572
—— (see Ehlers, V. J.)—**125**, 2008; **127**, 529
—— (see Petersen, F. Russell)—**125**, 284; **126**, 252; **128**, 1740
Shull, F. B. (see Allas, R. G.)—**125**, 941; **127**, 1252
Shuskus, Alexander J. Electron spin resonance of Fe^{3+} and Mn^{2+} in single crystals of CaO—**127**, 1529
—— Electron spin resonance of Gd^{3+} and Eu^{2+} in single crystals of CaO—**127**, 2022
—— (see Wylie, D. W.)—**125**, 451
Shwe, Hla, Frances M. Smith, and Walter H. Barkas. Decay of neutral pions—**125**, 1024
Sibley, W. A. and E. Sonder. *F*- and *M*-band absorption in heavily γ-irradiated KCl—**128**, 540
Siegel, I. (see Nelson, W. F.)—**127**, 2025
Siivola, A. (see Nurmia, M.)—**127**, 943
Sikkeland, Torbjørn, Eldon L. Haines, and Victor E. Viola, Jr. Momentum transfer in heavy-ion-induced fission—**125**, 1350
—— (see Viola, Victor E., Jr.)—**128**, 767
Silbert, M. G. Nuclear energy levels of C^{12}; two-stage reaction $N^{11}(t,n)O^{16*}(\alpha)C^{12}$—**127**, 2113
Silsbee, Henry B. (see McCollum, D. C., Jr.)—**127**, 119
Silsbee, R. H. Thermal broadening of Mössbauer line and of narrow-line electronic spectra in solids—**128**, 1726
Silver, A. H., T. Kushida, and J. Lambe. Nuclear magnetic dipole coupling in Al_2O_3—**125**, 1147
Silverman, B. D. Microwave absorption in cubic $SrTiO_3$—**125**, 1921
—— Temperature-dependent spectrum of antiferroelectric linear chain model—**128**, 638
Silverman, J. (see Garland, C. W.)—**127**, 2287(E)
Silverman, J. N. (see Scherr, Charles W.)—**127**, 830
Silverstein, S. D. Influence of electron interactions on metallic properties. I. Specific heat—**128**, 631
Simhony, M. (see Many, A.)—**126**, 1989
Simmons, L. M. (see Rojo, O.)—**125**, 273
Simmons, R. O. and R. W. Balluffi. Measurement of equilibrium concentrations of lattice vacancies in Au—**125**, 862
Simmons, W. W., W. J. O'Sullivan, and W. A. Robinson. Nuclear spin-lattice relaxation in dilute paramagnetic sapphire—**127**, 1168
Simon, Gerhard. Propagation of ultrasound in ferromagnetic metals at low temperatures—**128**, 161
Simpson, J. Arol (see Marton, L.)—**126**, 182
Sinanoğlu, Oktay (see Kestner, Neil R.)—**128**, 2687
Singer, Paul. Decay mode $\omega \to 2\pi+\gamma$—**128**, 2789
Singh, A. D. Temperature dependence of surface tension of He II—**125**, 802
Singh, Sarjant and John M. Alexander. Recoil study of reactions $C^{12}(p,pn)C^{11}$—**128**, 711
Singh, Virendra. Analyticity in complex angular momentum plane of Coulomb scattering amplitude—**127**, 632
—— **and Bhalchandra M. Udgaonkar.** Self-consistent model for nonleptonic decays of Σ and Λ hyperons—**126**, 2248
—— **and Bhalchandra M. Udgaonkar.** Vector charge and magnetic moment form factors of nucleon—**128**, 1820
Singwi, K. S. (see Rahman, A.)—**126**, 986; **126**, 997
Sinha, K. P. and U. N. Upadhyaya. Phonon-magnon interaction in magnetic crystals—**127**, 432
Sisson, David H. (see Alexander, John M.)—**128**, 2288
Sjölander, A. (see Rahman, A.)—**126**, 986; **126**, 997
Skofronick, J. G. (see Walters, W. L.)—**125**, 2012
Skurnik, E. Z. (see Birk, M.)—**126**, 726
Slack, Glen A. Anisotropic thermal conductivity of pyrolytic graphite—**127**, 694
—— Thermal conductivity of MgO, Al_2O_3, $MgAl_2O_4$, and Fe_3O_4 crystals from 3°K and 300°K—**126**, 427
Sladek, R. J. (see Keyes, R. W.)—**125**, 478
Slater, J. C., G. F. Koster, and J. H. Wood. Symmetry and free electron properties of Ga energy bands—**126**, 1307
Šlaus, I. (see Ilakovac, K.)—**128**, 2739
Slobodrian, R. J. Elastic and inelastic scattering of 28.1-MeV deuterons—**125**, 1003
—— Stripping with 28-MeV deuterons—**126**, 1059
Smith, A. C. H., E. Caplinger, R. H. Neynaber, Erhard W. Rothe, and S. M. Trujillo. Electron impact ionization of atomic N—**127**, 1647
—— (see Marino, Lawrence L.)—**128**, 2243
Smith, A. M. and F. E. Steigert. Elastic scattering in N-N, C-N, and C-C systems—**125**, 988
Smith, Alan B. Elastic and inelastic scattering of fast neutrons from Th^{232}—**126**, 718

Smith, F. J. and J. G. Brennan. Use of normal coordinates in nuclear physics—**125**, 971
Smith, Frances M. (see Shwe, Hla)—**125**, 1024
Smith, Gerald A. (see Crawford, Frank S., Jr.)—**128**, 368
—— (see Grard, Fernand)—**127**, 607
Smith, H. L., R. K. Smith, and R. L. Henkel. Neutron-induced fission of Pu^{241}—**125**, 1329
Smith, Kenneth, Robert P. McEachran, and Peter A. Fraser. Effect of virtual excitation of 2*s* state on elastic scattering of electrons by atomic H—**125**. 553
Smith, Kenneth F. (see Alpert, Seymour S.)—**125**, 256
Smith, R. J., A. I. Schindler, and E. W. Kammer. Electrical resistivity and thermoelectric power of Pd after H desorption—**127**, 179
Smith, R. K. (see Smith, H. L.)—**125**, 1329
Smith, Richard L. Two-photon photoelectric effect—**128**, 2225
Smith, W. G. (see Ritter, J. C.)—**128**, 1778
Smith, William R. and Eugene V. Ivash. Distorted wave calculations of (d,p) angular distributions—**128**, 1175
Smoluchowski, R. Problem of anomalous resistivity in Pu—**125**, 1577
—— (see Merriam, M. F.)—**125**, 52; **125**, 65
Snowdon, S. C. (see Kent, D. W.)—**125**, 331
—— (see Malmberg, P. R.)—**128**, 351
Soda, Toshio and Ramabadhra Vasudevan. Thermodynamic behavior of liquid He^3 in possible superfluid phase. I—**125**, 1484
Soden, R. R. (see Johnson, L. F.)—**126**, 1406
Sokolov, A. A. and B. A. Lysov. Motion of electron with radiation damping and boundary conditions—**128**, 2422
——, **I. M. Ternov, and Yu. M. Loskutov.** Effect of quantum fluctuation on vertical oscillations of electron moving in magnetic field—**125**, 731
Sokolowski, J. S. (see Birk, M.)—**126**, 726
Solomon, I. and J. Ezratty. Magnetic resonance with strong radio-frequency fields in solids—**127**, 78
Soltysik, Edward A. (see McFarland, Robert H.)—**127**, 2090; **128**, 1758; **128**, 2222
Sommers, H. S., Jr. (see Meyerhofer, Dietrich)—**126**, 1329
Sonder, E. Magnetism of KCl—**125**, 1203
—— (see Sibley, W. A.)—**128**, 540
Sorokin, P. P., M. J. Stevenson, J. R. Lankard, and G. D. Pettit. Spectroscopy and optical maser action in $SrF_2:Sm^{2+}$—**127**, 503
—— (see Title, R. S.)—**128**, 62
Sosin, A. Energy dependence of electron damage in Cu—**126**, 1698
—— **and H. H. Neely.** Influence of foreign solute atoms on stage I recovery in electron-irradiated Cu—**127**, 1465
Spearman, T. D. (see Kennedy, J.)—**126**, 1596
Spector, Harold N. Amplification of acoustic waves through interaction with conduction electrons—**127**, 1084
—— Magnetoacoustic effects in nondegenerate semiconductors—**125**, 1880
—— Magnetoacoustic effects in tilted magnetic fields—**125**, 1192
Spedding, F. H. (see Strandburg, D. L.) **127**, 2046
Spejewski, E. H. (see Howe, D. A.)—**128**, 2748
Spencer, E. G., R. T. Denton, and R. P. Chambers. Temperature dependence of microwave acoustic losses in YIG—**125**, 1950
—— (see Galt, J. K.)—**127**, 1572
Spencer, L. V. and J. Coyne. Theory of deep penetration of electrons and charged particles—**128**, 2230
Spicer, W. E. Photoemission and band structure of semiconducting compound CsAu—**125**, 1297
Spitzer, W. G., Robert C. Miller, D. A. Kleinman, and L. E. Howarth. Far infrared dielectric dispersion in $BaTiO_3$, $SrTiO_3$, and TiO_2—**126**, 1710
—— (see Crowell, C. R.)—**127**, 2006
—— (see Kaiser, W.)—**127**, 1950
—— (see Kleinman, D. A.)—**125**, 16
Spong, F. W. (see Moore, T. W.)—**125**, 846; **126**, 2261(E)
Spruch, Larry (see Hahn, Yukap)—**128**, 932
—— (see O'Malley, Thomas F.)—**125**, 1300
—— (see Rosenberg, Leonard)—**125**, 1407
Squires, Euan J. (see Charap, John M.)—**127**, 1387
Srivastava, P. K. Lee model with two V particles—**128**, 2906
Stapp, Henry P. Derivation of CPT theorem and connection between spin and statistics from postulates of S-matrix theory—**125**, 2139
—— Intrinsic parity from S-matrix viewpoint—**128**, 1963
Starke, E. A., Jr., C. H. Cheng, and Paul A. Beck. Low-temperature specific heat of Ti alloys with CsCl-type ordered structure—**126**, 1746
Starner, J. W. (see Bunker, M. E.)—**127**, 844
Statz, H. (see Tang, C. L.)—**128**, 1013
Steffen, Rolf M. (see Alexander, P.)—**128**, 1783
—— (see Matthias, Eckart)—**125**, 261
Stehney, Andrew F. and Ellis P. Steinberg. Br^{80}—a new nuclide—**127**, 563
Steigert, F. E. (see Kelley, J. G.)—**126**, 2100
—— (see Smith, A. M.)—**125**, 988
Steinberg, Ellis P. (see Stehney, Andrew F.)—**127**, 563
Steinberger, J. (see Colley, D.)—**128**, 1930
—— (see Samios, N. P.)—**126**, 1844
Steiner, Herbert M. (see Elioff, Tommy)—**128**, 869
Stelson, P. H. (see McGowan, F. K.)—**126**, 257
—— (see Ritter, R. C.)—**128**, 2320
—— (see Robinson, R. L.)—**125**, 1373
Stephens, W. E. (see Del Bianco, W. E.)—**126**, 709
Stern, D. $\pi\pi\gamma$ decay mode of neutral K mesons—**128**, 389
Sternglass, E. J. (see Kanter, H.)—**126**, 620
Sternheim, Morton M. Second order effects of nuclear magnetic fields—**128**, 676
Sternheimer, R. M. Electronic polarizabilities of alkali atoms—**127**, 1220
—— Second-order quadrupole effect for nuclear hexadecapole coupling in ions—**127**, 812; **128**, 2925(E)
Stevenson, M. J. (see Sorokin, P. P.)—**127**, 503
—— (see Title, R. S.)—**128**, 62
Stevenson, M. Lynn, L. W. Alvarez, B. C. Maglić, and A. H. Rosenfeld. Spin and parity of ω meson—**125**, 687; **125**, 2208(E)
—— (see Button, Janice)—**126**, 1855
Stevenson, P. C. (see Hicks, H. G.)—**128**, 700
Stewart, A. T., J. B. Shand, J. J. Donaghy, and J. H. Kusmiss. Fermi surface of Be by positron annihilation—**128**, 118
—— (see Woods, A. D. B.)—**128**, 1112
Stewart, Benjamin U. (see Paranjape, B. V.)—**126**, 1668
Stewart, Leona, J. E. Brolley, Jr., and L. Rosen. d-He^4 elastic scattering from 6 to 14 MeV—**128**, 707
—— (see Rosen, L.)—**126**, 1150
Stewart, M. G. (see Clikeman, F. M.)—**126**, 1822
Stickler, J. J., H. J. Zeiger, and G. S. Heller. Quantum effects in Ge and Si. I—**127**, 1077
Stillinger, Frank H., Jr. Some remarks on correlations in classical order-disorder phenomena—**126**, 1239
St. John, Robert M. (see Lin, Chun C.)—**128**, 1749
Stone, Philip M. Cs oscillator strengths—**127**, 1151
—— **and Lewis Agnew.** Plasma-broadened Cs lines—**127**, 1157
Stoner, A. W. (see Gunnink, Ray)—**126**, 642
Stooksberry, R. W. (see DeJuren, J. A.)—**127**, 1229
Stork, D. H. (see Helmy, E.)—**127**, 254
Storms, E. K. (see Giorgi, A. L.)—**125**, 837
Strandberg, M. W. P. Effect of electrostatic interactions on nuclear magnetic resonance dipolar hfs with strong correlation-time narrowing—**127**, 1162
Strandburg, D. L., S. Legvold, and F. H. Spedding. Electrical and magnetic properties of Ho single crystals—**127**, 2046

Stratton, R. Diffusion of hot and cold electrons in semiconductor barriers—**126**, 2002
—— Theory of field emission from semiconductors—**125**, 67
Straub, W. D. (see Klein, C. A.)—**125**, 468
Strauss, A. J. (see Wright, G. B.)—**125**, 1534
Streever, Ralph L., L. H. Bennett, R. C. La Force, and G. F. Day. Nuclear magnetic resonance of Ni^{61} in dilute alloys of Ni in Co—**128**, 1632
—— (see Bennett, Lawrence H.)—**126**, 2141
Strnad, Janez. Momentum distributions for protons in Li^6 in cluster model—**125**, 1639; **126**, 2262(E)
Stroh, Alan N. Force on moving dislocation—**128**, 55
St. Romain, F. A., T. W. Bonner, R. L. Bramblett, and J. Hanna. Low-energy neutrons from reaction $Be^9(\alpha,n)C^{12}$—**126**, 1794
Strong, K. A., G. D. Marshall, R. M. Brugger, and P. D. Randolph. Scattering of slow neutrons from propane gas—**125**, 933
—— (see Schmunk, R. E.)—**128**, 562
Strongin, Myron, George O. Zimmerman, and Henry A. Fairbank. Specific heat of liquid He^3—**128**, 1983
Stuart, T. P., J. D. Anderson, and C. Wong. Elastic scattering of 24-MeV neutrons by Al, Fe, Sn, and Bi—**125**, 276
Sturge, M. D. Optical absorption of GaAs between 0.6 and 2.75 eV—**127**, 768
Subudhi, K. S. (see Daniel, H.)—**128**, 261
Suffczynski, M. Superconductivity in case of overlapping bands—**128**, 1538
Sugawara, M. and A. Kanazawa. N/D method—**126**, 2251
Suhl, H. (see Cooper, B. R.)—**127**, 57
—— (see Werthamer, N. R.)—**125**, 1402
Summerfield, G. C. (see Lichtenberg, D. B.)—**127**, 1806; **128**, 2926(E)
Sutton, J. (see Townsend, P.)—**128**, 591
Swalen, J. D. (see Ibers, James A.)—**127**, 1914
Swann, W. F. G. General approach to electromagnetic origin of cosmic-ray energy—**126**, 757
Swanson, N. (see Marton, L.)—**126**, 182
Swanson, William P. (see Gates, Duane C.)—**125**, 1310
Swenson, C. A. (see Heltemes, E. C.)—**128**, 1512
Swiatecki, Wladyslaw J. (see Bowman, Harry R.)—**126**, 2120
Swift, C. D. (see Jopson, R. C.)—**127**, 1612; **128**, 2671
Sykes, M. F. (see Domb, C.)—**128**, 168
Szász, Levente. Atomic many-body problem. I. General theory of correlated wave functions—**126**, 169
Szklarz, E. G. (see Giorgi, A. L.)—**125**, 837

Taft, E. A. (see Philipp, H. R.)—**127**, 159
Tahir-Kheli, R. A. and D. ter Haar. Use of Green functions in theory of ferromagnetism. I. General discussion of spin-S case.—**127**, 88
—— **and D. ter Haar.** Use of Green functions in theory of ferromagnetism. II. Dyson spin waves—**127**, 95
Takei, W. J., R. R. Heikes, and G. Shirane. Magnetic structure of Mn_4N-type compounds—**125**, 1893
—— (see Shirane, G.)—**126**, 49
Taketani, H. and W. Parker Alford. (p,n) cross sections on Ti^{47}, V^{51}, Cr^{52}, Co^{59}, and Cu^{65} from 4 to 6.5 MeV—**125**, 291
Talmi, Igal. Neutron $d_{\frac{1}{2}}^n$ configurations in Zr isotopes—**126**, 2116
—— Seniority of $f_{7/2}^4$ levels in Cr^{52}—**126**, 1096
—— (see Kendall, H. W.)—**128**, 792
Tang, C. L. and H. Statz. Nonlinear effects in resonant absorption of several oscillating fields by gas—**128**, 1013
Tange, H. (see Tatsumoto, E.)—**128**, 2179
Tani, S. (see Rosendorff, S.)—**128**, 457
Tanttila, W. H. (see Verber, C. M.)—**125**, 1149
Tarski, Jan (see Blankenbecler, R.)—**125**, 782
Tassie, L. J. (see Lipkin, H. J.)—**126**, 116
Tatsumoto, E., H. Fujiwara, H. Tange, and Y. Kato. Pressure dependence of intrinsic magnetization of Fe and Ni—**128**, 2179
Taylor, A. E. (see Cocconi, G.)—**126**, 277
Taylor, John R. Analyticity of positions and residues of Regge poles—**127**, 2257
Taylor, M. T. (see Rose, F. E.)—**127**, 1122
Taylor, R. (see Lehmann, P.)—**126**, 1183
Taylor, R. B. (see Carver, J. H.)—**127**, 2198
Taylor, R. D. (see Frauenfelder, H.)—**126**, 1065
—— (see Nagle, D. E.)—**125**, 490
Taylor, T. T. Effect of quadrupolar polarizability upon field gradient in tetragonal lattices—**127**, 120
—— (see Hewitt, R. R.)—**125**, 524
Teaney, Dale T. (see Montgomery, Hugh)—**128**, 80
Teitler, S. Driven classical system and characteristic functions—**125**, 405
Temkin, A. Nonadiabatic theory of electron-H scattering—**126**, 130
ter Haar, D. (see Tahir-Kheli, R. A.)—**127**, 88; **127**, 95
Ternov, I. M. (see Sokolov, A. A.)—**125**, 731
Terrell, James. Neutron yields from individual fission fragments—**127**, 880; **128**, 2925(E)
Tettamanzi, N. (see Nardelli, G. F.)—**126**, 1283
Teutonico, L. J. Moving edge dislocations in cubic and hexagonal materials—**125**, 1530
—— Uniformly moving dislocations of arbitrary orientation in anisotropic media—**127**, 413
Tewes, H. A. (see Bonner, N. A.)—**127**, 217
Tewordt, Ludwig. Lifetime of quasi-particle in superconductor at finite temperatures and application to problem of thermal conductivity—**128**, 12
—— Lifetimes of quasi-particles and phonons in superconductor at zero temperature—**127**, 371
Thaddeus, P. and R. Novick. Optical detection of level crossing in $(5s5p)\ ^3P_1$ state of Cd^{111} and Cd^{113}—**126**, 1774
Thirring, W. Lagrangian formulation of Zachariasen model—**126**, 1209
Thomas, D. E. (see Chynoweth, A. G.)—**125**, 877
Thomas, D. G. and J. J. Hopfield. Optical properties of bound exciton complexes in CdS—**128**, 2135
Thomas, T. Darrah, Glen E. Gordon, Robert M. Latimer, and Glenn T. Seaborg. Spallation-fission competition in astatine compound nuclei formed by heavy-ion bombardment—**126**, 1805
Thompson, A. Low, Horst Meyer, and E. Dwight Adams. Nuclear susceptibility of liquid He^3 under pressure—**128**, 509
Thompson, Stanley G. (see Bowman, Harry R.)—**126**, 2120
—— (see Gilmore, John)—**128**, 2276
Thomson, D. B., L. Cranberg, and J. S. Levin. Scattering of fast neutrons by Mg—**125**, 2049
Thorndike, E. H. Extrapolation of proton-proton scattering data to one-pion exchange pole—**127**, 251
—— (see Hoffman, R. A.)—**125**, 973
Thorsen, A. C. (see Berlincourt, T. G.)—**127**, 710
Tietge, J. and W. Püschel. Mean lifetime of π^0 meson—**127**, 1324
Timusk, T. and W. Martienssen. Recombination luminescence in alkali halides—**128**, 1656
Tinkham, M. (see Barker, A. S., Jr.)—**125**, 1527
Tinlot, John H. (see Warner, Robert E.)—**125**, 1028
Tipler, P. (see O'Connell, J. S.)—**126**, 228
Title, R. S., P. P. Sorokin, M. J. Stevenson, G. D. Pettit, J. E. Scardefield, and J. R. Lankard. Optical spectra and paramagnetic resonance of U^{4+} ions in alkaline earth fluoride lattices—**128**, 62
Tobocman, W. and W. R. Gibbs. Distortion effects in $Ca^{40}(d,p)Ca^{41}$ reaction—**126**, 1076
—— (see Peshkin, Murray)—**127**, 1865
Tomaš, P. (see Ilakovac, K.)—**128**, 2739

Tomasini, G. (see Davis, D. H.)—**127**, 605
Tomboulian, D. H. (see Baker, D. J., Jr.)—**128**, 677
—— (see Peterson, T. J., Jr.)—**125**, 235
Torres, S. (see Facetti, J.)—**127**, 1690
Torrey, H. C. (see Korringa, Jan)—**127**, 1143
Toth, K. S. Angular distribution and ranges of N^{13} particles resulting from 27.5-MeV N^{14} ions on Mg^{24}—**126**, 1489
Toth, Robert S. (see Sato, Hiroshi)—**127**, 469
Townes, B. M. (see Allaby, J. V.)—**125**, 2077
Townsend, P. and J. Sutton. Investigation by electron tunnelling of superconducting energy gaps in Nb, Ta, Sn, and Pb—**128**, 591
——, G. K. Chang, and R. E. Jones. Thermal conductivity of dilute In-Hg alloys—**126**, 919
Trabal, E. (see Facetti, J.)—**127**, 1690
Trammell, G. T. Elastic scattering at resonance from bound nuclei—**126**, 1045
Trapp, H. D. (see Van Ostenburg, D. O.)—**126**, 938; **128**, 1550
Trehan, P. N. and D. M. Van Patter. Decay of 18-min Br^{80}—**126**, 266
Treiman, S. B. Adair spin analysis with parity nonconservation—**128**, 1342
—— (see Landshoff, P. V.)—**127**, 649
Treves, D. Magnetic studies of some orthoferrites—**125**, 1843
Trier, A. (see Gonzalez, L.)—**126**, 271
Tripp, Robert D. (see Kirz, Janos)—**126**, 763
Troutner, David E. (see Wahl, Arthur C.)—**126**, 1112
Trueman, T. Laurence. Influence of $\bar{K}$-nucleon interactions on pion-hyperon scattering—**127**, 2240
Trujillo, S. M. (see Rothe, Erhard W.)—**125**, 582; **126**, 598; **128**, 659
—— (see Smith, A. C. H.)—**127**, 1647
Tsang, Tung (see Connor, Donald)—**126**, 1506
—— (see O'Reilly, D. E.)—**128**, 2639
Tsao, C. H. (see Blue, M. H.)—**125**, 1386
Tuan, San Fu. Isobar mechanism for pion-baryon higher resonances—**125**, 1761
—— (see Nambu, Yoichiro)—**128**, 2622
Tubis, Arnold and Bernard Chern. Impulse approximation calculation of high-energy deuteron-deuteron elastic scattering—**128**, 1352
Turberfield, K. C. and P. A. Egelstaff. Phonon frequency distribution in V at several temperatures—**127**, 1017
Turkiewicz, Jan A. Structure of spectrum of protons from $Te^{122}(n,p)Sb^{122}$ reaction at 14.1 MeV—**127**, 570
Turkot, F. (see Chadwick, G. B.)—**128**, 1823
—— (see Fujii, T.)—**128**, 1836
Turner, R. E. (see Parry, W. E.)—**128**, 929
Turner, W. J. and W. E. Reese. Infrared lattice bands in AlSb—**127**, 126

Überall, H. Bremsstrahlung accompanying high-energy π meson-proton collisions—**126**, 801
—— Neutrino-induced reaction in C^{12}—**126**, 876
—— Nuclear reactions induced by neutrinos of intermediate energy—**126**, 1572
—— Scattering of electromagnetic waves in Saxon-Schiff theory—**128**, 2429
Udgaonkar, Bhalchandra M. (see Singh, Virendra)—**126**, 2248; **128**, 1820
Uehling, Edwin A. (see Schmidt, V. Hugo)—**126**, 447
Unruh, W. P. (see Prosser, F. W., Jr.)—**125**, 594
Upadhyaya, U. N. (see Sinha, K. P.)—**127**, 432
Utiyama, Ryoyu. Renormalization of quantum electrodynamics in classical gravitational field—**125**, 1727

Vachaspati. Harmonics in scattering of light by free electrons—**128**, 664
Vager, Z. (see Goldring, G.)—**127**, 929
Valk, Henry S. (see Goldhammer, Paul)—**127**, 945; **128**, 2925(E)
Valstyn, E. P., J. P. Hanton, and A. H. Morrish. Ferromagnetic resonance of single-domain particles—**128**, 2078
Vandenbosch, R. and J. R. Huizenga. Kinetic energy distributions of fragments from fission of Au, Tl, Pb, and Bi—**127**, 212
—— (see Chaudhry, R.)—**126**, 220
—— (see Huizenga, J. R.)—**126**, 210
Van de Walle, Remy T. (see Carmony, D.)—**127**, 959
Van Heyningen, R. Electron drift mobility in AgCl—**128**, 2112
Van Hove, L. (see McVoy, K. W.)—**125**, 1034
van Loef, J. J. (see Gonzalez, L.)—**126**, 271
Van Ostenburg, D. O., D. J. Lam, H. D. Trapp, and D. E. MacLeod. Knight shifts and magnetic susceptibilities in V alloys with Ti, Cr, and Tc—**128**, 1550
——, H. Trapp, and D. J. Lam. Nuclear magnetic resonance of Tc^{99} in Tc metal and Tc^{99} and V^{51} in Tc-V alloys—**126**, 938
Van Patter, D. M., N. Nath, S. M. Shafroth, S. S. Malik, and M. A. Rothman. γ rays from inelastic neutron scattering in Cr—**128**, 1246
—— (see Trehan, P. N.)—**126**, 266
van Reuth, E. C. (see Cheng, C. H.)—**126**, 2030
van Vliet, K. M. (see Khokley, W. S.)—**128**, 1123
Varma, J. and M. A. Eswaran. Decay of Se^{75} and lifetime of 280-kev state of As^{75}—**125**, 656
—— **and M. A. Eswaran.** Inelastic scattering of γ rays by bound electrons—**127**, 1197
Vasudevan, Ramabadhra (see Soda, Toshio)—**125**, 1484
Vaughn, F. J. (see Imhof, W. L.)—**125**, 1334
Vaughn, R. J. (see Chase, L. F., Jr.)—**127**, 859
Veal, Boyd W. and John A. Rayne. Heat capacity of β-CuZn below 4.2°K—**128**, 551
Veilex, R. (see Libchaber, A.)—**127**, 774
Verber, C. M., H. P. Mahon, and W. H. Tanttila. Nuclear resonance of Al in synthetic ruby—**125**, 1149
Verma, G. S. (see Agrawal, Bal Krishna)—**126**, 24; **127**, 501; **128**, 603
Vick, L. L. J. (see Hamilton, J.)—**128**, 1881
Videira, A. L. L. (see MacDowell, S. W.)—**126**, 878
Villi, C. (see Demanins, F.)—**125**, 318
Viola, Victor E., Jr., and Torbjørn Sikkeland. Total cross sections for fission of U^{238} induced by He^4 and heavy ions—**128**, 767
—— (see Sikkeland, Torbjørn)—**125**, 1350
Visscher, W. M. (see Frauenfelder, H.)—**126**, 1065
Vogt, Rochus. Primary cosmic-ray and solar protons—**125**, 366
von Engel, A. and K. W. Arnold. Fast neutral particles from arc cathodes—**125**, 803
von Molnar, S. (see Mase, Shoichi)—**127**, 1030
von Roos, Oldwig. Influence of correlations on dielectric behavior of electron gas. Nonperturbative approach to many-fermion system—**128**, 911
—— (see Levine, Paul H.)—**125**, 207
von Turkovich, B. (see Koehler, J. S.)—**128**, 573
Vook, Frederick L. Low-temperature length change measurements of electron-irradiated Ge and Si—**125**, 855
Voshall, R. E. (see Pack, J. L.)—**127**, 2084
Voslamber, D. and D. K. Callebaut. Stability of force-free magnetic fields—**128**, 2016
Vuylsteke, Arthur A. (see Donovan, Russell E.)—**127**, 76

Waddell, Charles N. (see Cence, Robert J.)—**128**, 1788
Wagner, R. W. (see Nelson, W. F.)—**127**, 2025
Wagner, William G. and David H. Sharp. M meson and generalization of Pomeranchuk relations—**128**, 2899
Wahl, Arthur, Robert L. Ferguson, David R. Nethaway, David E. Troutner, and Kurt Wolfsberg. Nuclear-charge distribution in low-energy fission—**126**, 1112

Wahlquist, Hugo D. (see Burt, P.)—**125**, 1785
Wainwright, T. E. (see Alder, B. J.)—**127**, 359
Walecka, J. D. Electromagnetic properties of low-lying states of $_6C_8^{12}$ in oscillating drop model—**126**, 663
—— Electron scattering from quantized liquid drop—**126**, 653
Walker, B. D. (see Wong, C.)—**128**, 2339
Walker, J. C. Hfs and nuclear moments of Tm^{166}—**127**, 1739
Walker, L. R. (see Dillon, J. F., Jr.)—**126**, 2261(E)
Walker, R. M. (see Lucasson, P. G.)—**127**, 485; **127**, 1130
Walker, T. G. (see Cocconi, G.)—**126**, 277
Walker, W. D. (see Shephard, W. D.)—**126**, 278
Walker, W. Scott (see Hudson, Cecil L., Jr.)—**128**, 1271
Wallace, Duane C. Spin waves in complex lattices—**128**, 1614
—— (see Keller, Joseph M.)—**126**, 1275
—— (see Narath, Albert)—**127**, 724
Wallace, W. E. (see Zanowick, R. L.)—**126**, 537
Wallis, M. (see DeJuren, J. A.)—**127**, 1229
Wallis, R. F. and D. C. Gazis. Surface effects in second order Doppler shift of Mössbauer resonance—**128**, 106
—— **and A. A. Maradudin.** Lattice anharmonicity and optical absorption in polar crystals. III. Quantum mechanical treatment in linear approximation—**125**, 1277
—— (see Jepsen, D. W.)—**125**, 1496
Walnut, Thomas H. Vibrational wave functions for anharmonic crystals—**126**, 83
Walsh, Walter M., Jr., and L. W. Rupp, Jr. Paramagnetic resonance of trivalent Fe^{57} in ZnO—**126**, 952
—— (see Montgomery, Hugh)—**128**, 80
Walt, M. (see Imhof, W. L.)—**125**, 1334
Walters, W. L., D. G. Costello, J. G. Skofronick, D. W. Palmer, W. E. Kane, and R. G. Herb. Anomalies in yield curves over 992-keV $Al^{27}(p,\gamma)Si^{28}$ resonance—**125**, 2012
Wanderlingh, F. (see Sette, D.)—**125**, 409
Wang, K. H., S. D. Baker, and J. A. McIntyre. Elastic and inelastic scattering of C^{12} by C^{12} at 127 MeV—**127**, 187
—— (see McIntyre, J. A.)—**125**, 584
Wannier, G. H. and D. R. Fredkin. Superposition decoupling of Bloch bands in the presence of homogeneous fields—**125**, 1910
—— (see Fredkin, D. R.)—**128**, 2054
Warburton, E. K. and H. O. Funsten. High-energy γ rays and low-energy protons and deuterons from $C^{12}+p$ for $E_p=14$–20 MeV—**128**, 1810
—— (see Brady, F. P.)—**128**, 790
—— (see Chase, L. F., Jr.)—**127**, 859
—— (see Schrank, G.)—**127**, 2159
Ware, A. A., H. K. Forsen, and A. A. Schupp. Harmonics of Kruskal limit and field diffusion in toroidal pinch discharge—**125**, 417
Waring, R. K., Jr. Classical microscopic model for magnetic resonance including relaxation effects—**125**, 1218
Warner, Robert E. and John H. Tinlot. Depolarization in 212-MeV quasi-elastic p-n scattering—**125**, 1028
Warren, Roger W. and James H. Parker, Jr. Ratio of diffusion coefficient to mobility coefficient for electrons in He, Ar, N_2, H_2, D_2, CO, and CO_2 at low temperatures and low E/p—**128**, 2661
Watanabe, H. and B. N. Brockhouse. Exchange field splitting in YbIG—**128**, 67
Watanabe, Takeshi, H. W. Schnopper, and F. N. Cirillo. K x-ray fluorescence yield of Ar—**127**, 2055
Waters, Edward L. and August H. Maki. Ti^{47} and Ti^{49} hfs in electron spin resonance of Ti (III) complexes—**125**, 233
Watson, Kenneth M. (see Goldberger, Marvin L.)—**127**, 2284
Watson, R. E. (see Freeman, A. J.)—**125**, 1978; **127**, 2058
Watson, W. K. R. (see Burt, P.)—**125**, 1770
Watson, W. W. (see Kelley, J. G.)—**126**, 2100
Watt, D. E., F. J. Bannister, J. B. Laidler, and F. Brown. Spontaneous fission half-life of Pu^{240}—**126**, 264
Wattenberg, A. (see Jones, R. S.)—**128**, 1357
Waugh, J. S. (see Miller, S. R.)—**126**, 528
Webb, E. H. (see Sandhu, H. S.)—**125**, 1017
Webb, Samuel L. (see Brophy, James J.)—**128**, 584
Weber, J. and G. Hinds. Interaction of photons and gravitons—**128**, 2413
Weber, T. A. and C. J. Mullin. Angular distribution of relativistic atomic K-shell photoelectrons—**126**, 615
Weger, M. Longitudinal nuclear magnetic relaxation in ferromagnetic Fe, Co, and Ni—**128**, 1505
Wegner, H. E. (see Blair, A. G.)—**127**, 1233
—— (see Miller, D. W.)—**125**, 2054
Weidenmüller, Hans A. Coulomb effects and O^{14} β-decay matrix element—**127**, 537; **127**, 2287(E); **128**, 841
Weidner, R. T. (see Kissinger, P. B.)—**126**, 506
Weinberg, Steven. Eikonal method in magnetohydrodynamics—**126**, 1899
—— Universal neutrino degeneracy—**128**, 1457
—— (see Goldstone, Jeffrey)—**127**, 965
Weiner, Daniel. de Haas-van Alphen effect in Bi-Te alloys—**125**, 1226
Weinstein, R. (see Boyarski, A. M.)—**128**, 2398
Weinstock, Jerome. Binary collision expansion of classical N-body Green's function—**126**, 341
Weiser, K. Theory of diffusion and equilibrium position of interstitial impurities in diamond lattices—**126**, 1427
Weisz, S. Z. (see Many, A.)—**126**, 1989
Wellner, Marcel. Mass quantization and lepton theory—**125**, 1750
Welsh, D. J. A. (see Frisch, H. L.)—**126**, 949
Wentzel, Gregor. Hyperons with and without doublet symmetry—**125**, 771
Wenzel, W. A. (see Beall, E. F.)—**126**, 1554
Wernick, J. H. (see Peter, M.)—**126**, 1395
—— (see Wertheim, G. K.)—**125**, 1937
—— (see Gossard, A. C.)—**128**, 1038
Werntz, Carl. Virtual state of α particle—**128**, 1336
Werthamer, N. R. and H. Suhl. Renormalization of many-fermion momentum-space distributions in higher random phase approximations—**125**, 1402
Wertheim, G. K. and J. H. Wernick. Mössbauer effect in some Fe-rare earth intermetallic compounds—**125**, 1937
Wetherell, A. M. (see Cocconi, G.)—**126**, 277
Whalen, J. F. (see Meadows, J. W.)—**126**, 197
Whaling, Ward (see Overley, J. C.)—**128**, 315
—— (see Powers, D.)—**126**, 61
Wheatley, J. C. (see Anderson, A. C.)—**127**, 671
Wheeler, John A. (see Baierlein, Ralph F.)—**126**, 1864
—— (see Fuller, Robert W.)—**128**, 919
Wheeler, R. G. and J. O. Dimmock. Exciton structure and Zeeman effects in CdSe—**125**, 1803
—— (see Dimmock, J. O.)—**127**, 391
White, H. S. (see Camerini, U.)—**128**, 362
White, J. A., H. J. Williams, and R. C. Sherwood. Paramagnetic susceptibility of terbium hexa-antipyrene triiodide—**128**, 581
White, Matthew B. (see Alpert, Seymour S.)—**125**, 256
Whitmer, R. F. and E. B. Barrett. Nonlinear interaction of electromagnetic wave with plasma layer in presence of static magnetic field. II. Higher harmonics and nonlinear propagation theory—**125**, 1478
Whitmore, D. H. (see Rajdev, Dilip)—**128**, 1030
Widmer, Hans. Effect of dislocations on self-diffusion in Ge—**125**, 30
Wiedenbeck, M. Total x-ray attenuation coefficients from 40 keV to 412 keV—**126**, 1009
Wiegand, Clyde (see Elioff, Tommy)—**128**, 869
Wiegand, D. A. (see Merriam, M. F.)—**125**, 52; **125**, 65
Wilcox, R. M. (see Miller, S. C.)—**125**, 629
Wildenthal, B. H. (see Prosser, F. W., Jr.)—**125**, 594
Wilets, L. (see Blair, J. S.)—**125**, 1625

Wilkinson, D. H. Self-consistent determination of effective radii of heavy nuclei for α-particle emission—**126**, 648
Wilkinson, M. K., E. O. Wollan, W. C. Koehler, and J. W. Cable. Investigations of paramagnetic neutron scattering from Cr—**127**, 2080
—— (see Cable, J. W.)—**125**, 1860; **127**, 714
—— (see Koehler, W. C.)—**126**, 1672
Willard, H. B. (see Bair, J. K.)—**128**, 299
Willey, Raymond S. Nuclear rotational spectra, Elliott model, and P_2 force—**126**, 1127
Williams, Ferd E. Theory of defect formation in alkali halides by ionizing radiation—**126**, 70
Williams, H. J. (see Clogston, A. M.)—**125**, 541
—— (see Peter, M.)—**126**, 1395
—— (see White, J. A.)—**128**, 581
Williams, R. M. and J. W. McGrath. Ratio of electric quadrupole moments of Ba^{137} and Ba^{135} nuclei—**127**, 184
Williams, Richard. Dielectric breakdown in CdS—**125**, 850
—— Effect of high electric field on absorption of light by PbI_2 and HgI_2—**126**, 442
Williams, Roscoe C. Quantum mechanical effects in stimulated optical emission—**126**, 1011
Williams, S. A. Magnetic octupole moments of axially symmetric deformed nuclei—**125**, 340
Williams, W. L. Magnetic, thermal, and optical properties of F center in NaH—**125**, 82
Willis, Charles R. Approach to equilibrium of quantum mechanical Gibbsian ensembles—**127**, 1405
—— **and Peter G. Bergmann.** Quantum mechanical Liouville equation for system in contact with reservoir—**128**, 391
Willis, W. J. (see Hart, E. L.)—**126**, 747
Willmann, R. B. (see Camerini, U.)—**128**, 362
Wills, John G. (see Baker, George A., Jr.)—**125**, 1754
Wilson, H. H. (see Bauer, R. W.)—**128**, 694
Wilson, R. R., A. A. Bartlett, J. J. Kraushaar, J. D. McCullen, and R. A. Ristinen. Level structure of Cr^{52}—**125**, 1655
Wilson, Richard (see Hoffman, R. A.)—**125**, 973
—— (see Lehmann, P.)—**126**, 1183
Wilson, W. B. Evidence for hopping transport in B-doped diamond—**127**, 1549
Wing, J. and J. R. Huizenga. (p,n) cross sections of V^{51}, Cr^{53}, Cu^{63}, Cu^{65}, Ag^{107}, Ag^{109}, Cd^{111}, Cd^{114}, and La^{139} from 5 to 10.5 MeV—**128**, 280
Winkler, G. (see Penselin, S.)—**127**, 524
Winter, Rolf G. Large-time exponential decay and "hidden variables"—**126**, 1152
Wojcicki, Stanley G. (see Graziano, William)—**128**, 1868
Wolf, Clarence J. and W. H. Johnston. Natural radioactivity of Re—**125**, 307
Wolf, Fred A. (see Mittleman, M. H.)—**128**, 2686
Wolf, S. (see Colley, D.)—**128**, 1930
Wolff, P. A. Theory of band structure of very degenerate semiconductors—**126**, 405
Wolfgang, Richard (see Read, Jaques B. J.)—**127**, 1722
Wolfram, Thomas and Joseph Callaway. Exchange narrowing of d bands in ferromagnets—**127**, 1605
—— (see Lehman, G. W.)—**128**, 1593
Wolfsberg, Kurt (see Wahl, Arthur C.)—**126**, 1112
Wolga, George J. Two-quantum transitions in microwave magnetic resonance spectrum of atomic chlorine—**127**, 805
Woll, E. J., Jr., and W. Kohn. Images of Fermi surface in phonon spectra of metals—**126**, 1693
Wollan, E. O. (see Cable, J. W.)—**125**, 1860; **127**, 714; **128**, 2118
—— (see Koehler, W. C.)—**126**, 1672
—— (see Wilkinson, M. K.)—**127**, 2080
Wong, C., J. D. Anderson, J. W. McClure, and B. D. Walker. Polarization of 24-MeV neutrons elastically scattered from C, Al, Fe, Sn, Pb, and Bi—**128**, 2339
—— (see Anderson, J. D.)—**126**, 2170
—— (see Stuart, T. P.)—**125**, 276
Wong, David Y. and H. Pierre Noyes. Electrostatic corrections to nucleon-nucleon dispersion relations—**126**, 1866
—— Regge poles and resonances in strong interaction—**126**, 1220
—— (see Frazer, William R.)—**128**, 1927
Wong, How-sen (see Carruthers, P.)—**128**, 2382
Wong, S. S. M. and E. Bleuler. Large-angle scattering of 18.7-MeV α particles by C^{12}—**125**, 280
Wood, D. L. and W. Kaiser. Absorption and fluorescence of Sm^{2+} in CaF_2, SrF_2, and BaF_2—**126**, 2079
—— (see Geschwind, S.)—**126**, 1684
Wood, G. T. (see Caspari, M. E.)—**127**, 1519
Wood, J. H. Energy bands in Fe via augmented plane wave method—**126**, 517
—— (see Slater, J. C.)—**126**, 1307
Woodbury, H. H. and G. W. Ludwig. Spin resonance of Pd and Pt in Si—**126**, 466
—— (see Segall, B.)—**128**, 76
Woodruff, Truman O. Sound absorption in liquid He II, $T<0.5°K$—**127**, 682
Woods, A. D. B., B. N. Brockhouse, R. H. March, A. T. Stewart, and R. Bowers. Crystal dynamics of Na at 90°K—**128**, 1112
—— (see Brockhouse, B. N.)—**128**, 1099
Wortman, D. E. (see Howe, D. A.)—**128**, 2748
—— (see Karayianis, N.)—**126**, 1443
Wright, G. B., A. J. Strauss, and T. C. Harman. Nonparabolic conduction band in HgSe and $HgSe_{0.8}Te_{0.8}$—**125**, 1534
Wu, C. S. (see Biavati, M. H.)—**125**, 1364
Wu, Ching-Sheng. Landau damping and resonant energy absorption—**127**, 1419
Wu, Fa Yueh and Eugene Feenberg. Theory of fermion liquid—**128**, 943
Wu, Tai Tsun. Perturbation theory of pion-pion interaction. I. Renormalization—**125**, 1436
—— Perturbation theory of pion-pion interaction. II. Two-pion approximation—**126**, 2219
Wyatt, Philip. Scattering of electromagnetic plane waves from inhomogeneous spherically symmetric particles—**127**, 1837
Wyld, H. W., Jr., and D. Pines. Kinetic equation for plasma—**127**, 1851
Wylie, D. W., A. J. Shuskus, C. G. Young, O. R. Gilliam, and Paul W. Levy. Electron spin resonance of radiation-induced defects in potassium azide—**125**, 451
Wyly, L. D. (see Dulaney, Harry)—**125**, 1620

Xuong, Nguyen-huu and Gerald R. Lynch. Search for multipion resonances in reaction $p+p \rightarrow 3\pi^+ + 3\pi^- + n\pi^0$—**128**, 1849

Yamaguchi, S. Ferrimagnetic structure of magnetite crystal as revealed by electron diffraction—**126**, 102
Yamaka, E. and R. G. Barnes. Paramagnetic resonance of Co ion in rutile single crystal—**125**, 1568
Yamamoto, S. S. (see Hart, E. L.)—**126**, 747
Yamanouchi, T. (see Melissinos, A. C.)—**128**, 2373
Yang, C. N. (see Lee, T. D.)—**126**, 2239; **128**, 885
Yao, Tsu. Strange particle production in proton-proton collisions—**125**, 1048
Yaqub, M. and C. Hohenemser. Resonance absorption of γ rays in normal and superconducting Sn—**127**, 2028
Yariv, Amnon. Paramagnetic resonance and charge compensation of tetravalent U (U^{4+}) in Ca, Sr, and BaF—**128**, 1588
—— **and W. H. Louisell.** Transition probability due to random perturbations—**125**, 558
Yntema, J. L. (d,t) reaction on Ti isotopes—**127**, 1659
—— (see Broek, H. W.)—**126**, 1514
—— (see Macfarlane, M. H.)—**127**, 204

Yoshimine, M. (see Clementi, E.)—**127**, 1618
Yoshimori, A. and J. Korringa. Fokker-Planck equation for spin relaxation—**128**, 1054
—— (see Korringa, J.)—**128**, 1060
Young, C. G. (see Wylie, D. W.)—**125**, 451
Young, James A. (see Bludman, Sidney A.)—**126**, 303
Yount, D. and J. Pine. Scattering of high-energy positrons from protons—**128**, 1842
Ypsilantis, Tom (see Elioff, Tommy)—**128**, 869
Yuan, L. C. L. (see Melissinos, A. C.)—**128**, 2373

Zachariasen, Fredrik and Charles Zemach. Pion resonances—**128**, 849
—— (see Frautschi, S. C.)—**126**, 2204
Zagury, N. (see MacDowell, S. W.)—**126**, 878
Zaidi, M. H. (see Salpeter, E. E.)—**125**, 248
Zakrzewski, J. (see Jones, B. D.)—**127**, 236
Zanowick, R. L. and W. E. Wallace. Ferromagnetism in EuH_2—**126**, 537
Zappa, L. (see Bisi, A.)—**128**, 2195
Zeidman, B. (see Broek, H. W.)—**126**, 1514
—— (see Lawson, R. D.)—**128**, 821
—— (see Macfarlane, M. H.)—**127**, 204
Zeiger, H. J. (see Stickler, J. J.)—**127**, 1077
Zemach, Charles (see Zachariasen, Fredrik)—**128**, 849
Zijlstra, H. (see Compaan, K.)—**126**, 1722
Zimmerman, George O. (see Strongin, Myron)—**128**, 1983
Zimmerman, J. E. and L. T. Crane. Anomalous lattice specific heat of Au and Zn at liquid He temperatures—**126**, 513
Zingg, S. (see Fatuzzo, E.)—**125**, 514
Zipf, T. F. (see Chamberlain, O.)—**125**, 1696
Zitter, R. N. Small-field galvanomagnetic tensor of Bi at 4.2°K—**127**, 1471
Zucker, A. (see Linder, B.)—**127**, 1280
Zwanziger, D. E. (see Barut, A. O.)—**127**, 974
Zweifel, P. F. (see Aamodt, R.)—**126**, 1165
Zylbersztejn, A. Theory of low-temperature impact ionization in high-purity Ge—**127**, 744

PHYSICAL REVIEW VOLUME 128, NUMBER 6 DECEMBER 15, 1962

Analytic Subject Index to Volume 128

References with (E) are to Errata. Items are listed under the following categories:

Acoustics
Astrophysics
Atomic and Molecular Beams
Atomic Mass and Abundance
Atomic Structure and Spectra
Biophysics
Chemical Effects and Properties
Constants, Standards, Units
Cosmic Radiation
Crystalline State
Dielectrics and Dielectric Properties
Diffraction
Diffusion
Elasticity and Plasticity
Electrical Conductivity and Resistance
Electrical Discharges
Electrical Properties
Electromagnetic Theory and Electrodynamics
Electrons and Positrons
Elementary Particle Interactions, General
Elementary Particle Interactions, Electromagnetic
Elementary Particle Interactions, Strong
Elementary Particle Interactions, Weak
Errata
Field Theory
Films, Properties
Fluid Dynamics
Gamma Rays
Gases
Geophysics
Helium, Liquid and Solid
Imperfections in Solids
Ionization
Ions
Ions and Electrons, Mobility
Liquids
Luminescence
Magnetic Properties
Magnetic Resonance
Mathematical Methods
Mechanics
Mesons and Hyperons
Methods and Instruments
Microwaves
Miscellaneous
Molecular Aggregates
Molecular Structure and Spectra
Neutrinos and Antineutrinos
Noise
Nuclear Fission
Nuclear Moments and Spin
Nuclear Photoeffects
Nuclear Reactions, General
Nuclear Reactions Induced by α Particles and He^3
Nuclear Reactions Induced by Deuterons and Tritons
Nuclear Reactions Induced by Mesons and Hyperons
Nuclear Reactions Induced by Neutrons
Nuclear Reactions Induced by Protons and Antiprotons
Nuclear Spectra
Nuclear Structure Theory
Optical Properties
Plasma Physics
Quantum Electrodynamics
Quantum Mechanics
Radiation
Radioactivity
Range and Energy Loss
Relativity and Gravitation
Scattering, General
Scattering of α Particles and He^3
Scattering of Deuterons and Tritons
Scattering of Electrons and Positrons
Scattering of Mesons and Hyperons
Scattering of Neutrons
Scattering of Protons and Antiprotons
Semiconductors
Spectra, General
Statistical Mechanics and Thermodynamics
Superconductivity
Surface Physics
Thermal Properties
X Rays

Absorption of Radiation (see **Optical Properties; Radiation**)
Acoustics
Electrodynamic properties of quantum plasma in uniform magnetic field, John J. Quinn and Sergio Rodriguez—2487
Magnetoacoustic measurements in noble metals at 350 Mc/sec, Henry V. Bohm and Vernon J. Easterling—1021
Measurement of signal velocity in region of resonant absorption by ultrasonic paramagnetic resonance, N. S. Shiren—2103
Propagation of ultrasound in ferromagnetic metals at low temperatures, Gerhard Simon—161
Quantum effects in ultrasonic attenuation in metals in magnetic field, John J. Quinn and Sergio Rodriguez—2494
Adsorption (see **Gases**)
Aerodynamics (see **Fluid Dynamics**)
Afterglow (see **Electrical Discharges**)
Alloys (see **Crystalline State**)

Author Index to Volume 126

References with (E) are to Errata.

Aamodt, R., K. M. Case, M. Rosenbaum, and P. F. Zweifel. Quasi-classical treatment of neutron scattering—1165

Adams J. Barclay. μ capture with six nucleon form factors—1567

Adler, Stephen L. Quantum theory of dielectric constant in real solids—413

—— Theory of valence band splittings at $k=0$ in zincblende and wurtzite structures—118

Agrawal, Bal Krishna and G. S. Verma. Lattice thermal conductivity at low temperatures—24

Aigrain, P. (see Pankove, J. I.)—956

Anderson, J. D., C. Wong, and J. W. McClure. Isobaric states in nonmirror nuclei—2170

Arai, Tadashi. Exchange interaction and Heisenberg's spin Hamiltonian—471

Arakawa, E. T. (see Frank, A. L.)—1947

Argyres, Petros N. Theory of tunneling and its dependence on longitudinal magnetic field—1386

Arnold, G. and N. Nereson. Neutron coherent scattering amplitudes for Cd and Eu—2262(E)

Asdente, M. and J. Friedel. 3*d* band structure of Cr—2262(E)

Auffray, J. P. Magnetic susceptibility of H_2 molecule—146

Aurivillius, Bengt and P. H. Fang. Ferroelectricity in compound $Ba_2Bi_4Ti_5O_{18}$—893

—— (see Fang, P. H.)—892

Austin, S. M., H. H. Barschall, and R. E. Shamu. Scattering of neutrons by α particles—1532

Axel, Peter. Electric dipole ground-state transition width strength function and 7-Mev photon interactions—671

—— (see O'Connell, J. S.)—228

Bahcall, John N. β decay in stellar interiors—1143

Baierlein, Ralph F., David H. Sharp, and John A. Wheeler. Three-dimensional geometry as carrier of information about time—1864

Bailyn, M. Maximum variational principle for conduction problems in magnetic field, and theory of magnon drag—2040

—— (see Franzak, E.)—2033

Baker, E. W. and S. Katcoff. Fission of Ag and Br in nuclear emulsion by 1.0–3.0-Bev protons—729

Baker, George A., Jr. Certain general order-disorder models in limit of long-range interactions—2071

Bannister, F. J. (see Watt, D. E.)—264

Bardon, Marcel, Paolo Franzini, and Juliet Lee. Mott scattering of polarized muons—1826

Barschall, H. H. (see Austin, S. M.)—1532

Barsella, B. and E. Fabri. Angular momenta in relativistic three-body systems—1561

Barshay, Saul. Theory of *P*-wave π-Λ resonance—1232

Barut, Asim O. Virtual particles—1873

Batterman, Boris W. Effect of thermal vibrations on diffraction from perfect crystals. I. Case of anomalous transmission—1461

Bauer, Charles L. and Robert B. Gordon. Structure sensitivity of *F*-center generation by x rays at low temperatures—73

Baum, James H. (see Boley, Forrest I.)—734

Beall, E. F., B. Cork, P. G. Murphy, W. A. Wenzel, C. M. P. Johnson, and L. J. Koester, Jr. Polarization in π^--p scattering between 500 and 940 MeV—1554

Bean, C. P. and D. S. Rodbell. Magnetic disorder as first-order phase transformation—104

Beck, Paul A. (see Cheng, C. H.)—2030

—— (see Starke, E. A., Jr.)—1746

Bennett, Lawrence H. and Ralph L. Streever, Jr. Nuclear moment of Ni^{61}—2141

Bennett, W. R., Jr. Hole burning effects in He-Ne optical maser—580

Bergmann, Peter G., Ivor Robinson, and Engelbert Schücking. Asymptotic properties of system with nonzero total mass—1227

Berinde, A. (see Hulubei, H.)—2174

Berkowitz, Edward H. γ rays resulting from Li bombardments of Li—2168

Bhattacherjee, S. K. and S. K. Mitra. β-γ directional correlation in Eu^{154}—1154

Biedenharn, L. C. Remarks on relativistic Kepler problem—845

Birk, M., A. E. Blaugrund, G. Goldring, E. Z. Skurnik, and J. S. Sokolowski. Lifetimes of some rotational leve's—726

Birkhoff, R. D. (see Frank, A. L.)—1947

Blankenbecler, R. and M. L. Goldberger. Behavior of scattering amplitudes at high energies, bound states, and resonances—766

Blatt, John M., K. W. Böer, and Werner Brandt. Bose-Einstein condensation of excitons—1691

Blaugrund, A. E. (see Birk, M.)—726

Blinc, R. (see Miller, S. R.)—528

Blount, E. I. Bloch electrons in magnetic field—1636

Bludman, Sidney A. and James A. Young. Electromagnetic production of charged vector mesons—303

Bodansky, D., R. K. Cole, W. G. Cross, C. R. Gruhn, and I. Halpern. Evaporation of coincident protons in α+Ni^{58} reactions—1082

Böer, K. W. (see Blatt, John M.)—1691

Boley, Forrest I., John A. Palsedge, and James H. Baum. Altitude dependence of longitudinal distribution of atmospheric Čerenkov radiation—734

Bonner, T. W. (see St. Romain, F. A.)—1794

Boulware, David G. and Walter Gilbert. Connection between gauge invariance and mass—1563

Bowers, V. A. (see Jen, C. K.)—1749

Bowman, Harry R., Stanley G. Thompson, J. C. D. Milton, and Wladyslaw J. Swiatecki. Velocity and angular distributions of prompt neutrons from spontaneous fission of Cf^{252}—2120

Boyd, G. D. (see Johnson, L. F.)—1406

Braid, T. H. (see Broek, H. W.)—1514

Bramblett, R. L. (see St. Romain, F. A.)—1794

Brandt, Werner (see Blatt, John M.)—1691

Breit, G. (see Lassila, K. E.)—881

Brenman, M. (see Miller, S. R.)—528

Broek, H. W., T. H. Braid, J. L. Yntema, and B. Zeidman. Elastic and inelastic scattering of 43-MeV α particles by Ni^{58} and Ni^{60}—1514

Broom, K. M. 14.5-MeV neutron-induced fission of U^{238}—627

Brown, E. Role of orthogonalization in determination of valence states in crystals—421

Brown, F. (see Watt, D. E.)—264

Brown, George A. (see Meyerhofer, Dietrich)—1329

Browne, Cornelius P. Comparison of α-particle energies from Po^{210} and Po^{214} and energy of Po^{210} α particles—1139

Brugger, Robert M. Scattering of slow neutrons by solid and liquid terphenyls—29

Bruninx, E. (see Rudstam, G.)—1852

Brysk, Henry. New scattering approximation—1589

Buckingham, M. J. (see Butler, S. T.)—1

Bureau, A. J. (see Clikeman, F. M.)—1822

Burke, Philip and Harry M. Schey. Elastic scattering of low-energy electrons by atomic H—147

—— **and H. M. Schey.** Polarization and correlation of electron spin in low-energy elastic electron-H collisions—163

Butler, S. T. and M. J. Buckingham. Energy loss of fast ion in plasma—1
Button, Janice, George R. Kalbfleisch, Gerald R. Lynch, Bogdan C. Maglić, Arthur H. Rosenfeld, and M. Lynn Stevenson. Pion-pion interaction in reaction $p+p \rightarrow 2\pi^+ + 2\pi^- + n\pi^0$—1858

Cabezas, Amado Y., Ingvar P. K. Lindgren, Richard Marrus' and William A. Nierenberg. Hfs of Pr^{142}—1004
Cable, J. W. (see Koehler, W. C.)—1672
Callaway, Joseph and Fred W. Cummings. Inelastic scattering of electrons in Ge—5
Capps, Richard H. Resonance-interference method for determining $K\Sigma N$ parity—1574
—— Σ^0 lifetime and associated photoproduction poles—324
Caretto, A. A., Jr. (see Merz, E. R.)—1173
Caris, John C., Edward A. Knapp, Victor Perez-Mendez, and Walton A. Perkins. Positive-pion cross sections on complex nuclei—295
Carleton, Nathaniel P. and Lawrence R. Megill. Electron energy distribution in slightly ionized air under influence of electric and magnetic fields—2089
Carroll, C. O. (see Johnson, W. R.)—352
Carruthers, P. Thermal conductivity of solids. III. Modification of three-phonon processes by isotopic scattering—1448
Case, K. M. (see Aamodt, R.)—1165
Catura, Richard C. and J. Reginald Richardson. New isotope In^{106}—646
Chang, G. K. and R. E. Jones. Low-temperature thermal conductivity of amorphous solids—2055
—— (see Toxen, A. M.)—919
Charap, S. H. Critical concentrations in magnetism—1393
Chaudhry, R., R. Vandenbosch, and J. R. Huizenga. Fission fragment angular distributions and saddle deformations—220
—— (see Huizenga, J. R.)—210
Cheng, C. H., K. P. Gupta, E. C. van Reuth, and Paul A. Beck. Low-temperature specific heat of bcc Ti-V alloys—2030
—— (see Starke, E. A., Jr.)—1746
Chew, Geoffrey F., Steven C. Frautschi, and Stanley Mandelstam. Regge poles in π-π scattering—1202
Clikeman, F. M., A. J. Bureau, and M. G. Stewart. Photoproton reaction in Be^9—1822
Cocconi, G., A. N. Diddens, E. Lillethun, G. Manning, A. E. Taylor, T. G. Walker, and A. M. Wetherell. High-energy proton scattering from C and D—277
Cochran, D. R. F. (see Frauenfelder, H.)—1065
Cochran, E. L. (see Jen, C. K.)—1749
Cochran, L. W. and D. W. Forester. Diffusion of slow electrons in gases—1785
Cohen, B. L., R. H. Fulmer, and A. L. McCarthy. Location of single-particle levels in medium mass nuclei—698
Cohen, Marshall H. Radiation in plasma. II. Equivalent sources—389
—— Radiation in plasma. III. Metal boundaries—398
Cole, G. H. A. Scattering of small wavelength neutrons by gas of hard spheres—383
Cole, R. K. (see Bodansky, D.)—1082
Collings, E. W. and F. T. Hedgcock. Low-temperature magnetic properties of dilute Mg-Mn, Al-Mn, Mg-Fe, and Al-Fe alloys—1654
Compaan, K. and H. Zijlstra. Effective-field approach to problem of interacting polarized particles—1722
Connor, Donald and Tung Tsang. Sign of Li^8 magnetic moment—1506
Cooper, John W. and Jerry B. Martin. Electron photodetachment from ions and elastic collision cross sections for O, C, Cl, and F—1482
Coren, Richard L. and Hellmut J. Juretschke. Magnetoresistance and domain structure in thin Ni films—1378
Cork, B. (see Beall, E. F.)—1554
Corliss, L. M. (see Hastings, J. M.)—556
Costikas, A. and L. I. Grossweiner. Photoequilibrium between KCl F and F' centers at 80°K—1410
Crane, L. T. (see Zimmerman, J. E.)—513
Crawford, J. H., Jr. (see Curtis, O. L., Jr.)—1342
Cross, W. G. (see Bodansky, D.)—1082
Csavinszky, P. Treatment of ionized impurity scattering in degenerate semiconductors. Application of variational technique in partial wave method—1436
Cummings, Fred W. (see Callaway, Joseph)—5
Currin, James D. Theory of exchange relaxation of hfs in electron spin resonance—1995
Curtis, O. L., Jr., and J. H. Crawford, Jr. Radiation-induced recombination and trapping centers in Ge. II. Annealing in γ-irradiated, Sb- and As-doped material—1342

Dangle, R. (see Salisbury, S. R.)—2143
Darewych, G. (see Neamtan, S. M.)—193
Darovskikh, V. F. (see Goritchev, P. A.)—2196
Das, T. P. (see Khubchandani, P. G.)—594
Datars, W. R. Electron spin resonance in antimony—975
Davis, H. T. (see Meyer, L.)—1927
DeCelles, Paul C. (see Durand, Loyal, III)—1882
Del Bianco, W. E. and W. E. Stephens. Photonuclear activation by 20.5-MeV γ rays—709
de Moraes, R. J. (see Gross, Bernhard)—930
Deutch, B. I. Measurement of magnetic moment of 279-keV state in Tl^{203} using resonance fluorescence—1168
Dexter, D. L. Cooperative optical absorption in solids—1962
Dicke, R. H. Lee-Yang vector field and isotropy of universe—1580
—— Long-range scalar interaction—1875
Dickinson, W. C., L. Passell, and O. Halpern. Studies of optics of neutrons. I. Measurement of neutron-proton coherent scattering amplitude by mirror reflection—632
Diddens, A. N. (see Cocconi, G.)—277
Dillon, J. F., Jr., and L. R. Walker. Ferrimagnetic resonance in rare-earth doped YIG. II. Tb substitution—2261(E)
Donnelly, R. J. (see Meyer, L.)—1927
Dorn, David W. Mike results—implications for spontaneous fission—693
Doyle, William T. Electron-nuclear double resonance studies of color centers—1421
Dreitlein, J. and H. Primakoff. Possible neutrinoless decay modes of muon—375
Dresselhaus, G. Ferro- and antiferromagnetism in cubic cluster of spins—1664
Dreyfus, R. W. and A. S. Nowick. Ionic conductivity of doped NaCl crystals—1367
Dropkin, J. J. (see Goldstein, B.)—966
Dumke, W. P. and R. R. Haering. Ultrasonic amplification in semimetals—1974
Durand, Loyal, III, Paul C. DeCelles, and Robert B. Marr. Lorentz invariance and kinematic structure of vertex functions—1882
Dwight, K. (see Lyons, D. H.)—540

Eisner, M. (see Kattawar, G. W.)—1054
Eldridge, H. B. (see Ritchie, R. H.)—1935
Elwyn, A. J. (see Lane, R. O.)—1105
Engelkemeir, D. W., K. F. Flynn, and L. E. Glendenin. Positron emission in decay of K^{40}—1818
Engelsberg, Stanley. Energy losses and collective excitations in crystal—1262
—— Functional derivative techniques in theory of superconductivity—1251
Everett, Allen. Corrections to impulse approximation in scattering from deuterons—831
Eyges, Leonard. Solution of Schrödinger equation for a periodic lattice. II—93

Fabri, E. (see Barsella, B.)—1561
Fang, P. H., C. R. Robbins, and Bengt Aurivillius. Ferroelectricity in compound $Bi_4Ti_3O_{12}$—892
—— (see Aurivillius, Bengt)—893
Ferguson, Robert L. (see Wahl, Arthur C.)—1112
Feuchtwang, T. E. Electron-nuclear double resonance spectrum of *F*-center electron in alkali halides (with NaCl structure)—1628
—— Hyperfine interaction constants of *F*-center electron with lattice in alkali halides (with NaCl structure)—1616
Finkelstein, David (see Schmidt, George)—1611
Fitch, V. L., S. L. Meyer, and P. A. Piroué. Particle production at large angles by 30- and 33-BeV protons—1849
Flinchbaugh, David E. (see Russek, Arnold)—573
Flinn, P. A. (see Maradudin, A. A.)—9; 2059
Flynn, C. P. Linde's law and scattering power of associated point defects—533
Flynn, K. F. (see Engelkemeir, D. W.)—1818
Foner, S. N. (see Jen, C. K.)—1749
Forbes, Fred F. (see Hobbie, Russell K.)—2137
Forester, D. W. (see Cochran, L. W.)—1785
Forrester, P. A. and C. F. Hempstead. Paramagnetic resonance of Tb^{3+} ions in $CaWO_4$ and CaF_2—923
Fowler, H. A. (see Marton, L.)—182
Frank, A. L., E. T. Arakawa, and R. D. Birkhoff. Optical emission from irradiated foils. II—1947
Frantz, J. (see Hulubei, H.)—2174
Franzak, E. and M. Bailyn. Multiphonon processes occurring in first-order perturbation theory—2033
Franzini, Paolo (see Bardon, Marcel)—1826
Frauenfelder, H., D. E. Nagle, R. D. Taylor, D. R. F. Cochran, and W. M. Visscher. Elliptical polarization of Fe^{57} γ rays—1065
Frautschi, Steven C., M. Gell-Mann, and F. Zachariasen. Experimental consequences of hypothesis of Regge poles—2204
—— (see Chew, Geoffrey F.)—1202
Friedel, J. (see Asdente, M.)—2262(E)
Frisch, H. L., J. M. Hammersley, and D. J. A. Welsh. Monte Carlo estimates of percolation probabilities for various lattices—949
Fujita, Jun-Ichi. Conserved current hypothesis and β decay of RaE—202
Fuller, Robert W. Dependence of neutron production in fission on rate of change of nuclear potential—684
Fulmer, R. H. (see Cohen, B. L.)—698

Gall, C. D. (see Kenney, V. P.)—736
Gallagher, C. J., Jr. Coupling of angular momenta in two-particle states in deformed even-even nuclei—1525
—— **and H. L. Nielsen.** Decay of 2.1-h Ta^{178}—1520
Gärtner, W. W., C. Loscoe, and H. Mette. Photomagnetothermal effect in semiconductors—1680
Gayley, R. I., Jr., E. A. Lynton, and B. Serin. Specific heats of Sn alloys and their relation to superconducting transition temperature—43
Gell-Mann, M. (see Frautschi, S. C.)—2204
Gerhart, J. B. (see Lieber, A. J.)—1496
Geschwind, S., P. Kisliuk, M. P. Klein, J. P. Remeika, and D. L. Wood. Sharp-line fluorescence, electron paramagnetic resonance, and thermoluminescence of Mn^{4+} in α-Al_2O_3—1684
Giaever, I., H. R. Hart, Jr., and K. Megerle. Tunneling into superconductors at temperatures below 1°K—941
Giamati, C. C. and F. Reines. Experiment test of conservation of nucleons—2178
Gibbs, W. R. (see Tobocman, W.)—1076
Gilbert, Walter (see Boulware, David G.)—1563
Glendenin, L. E. (see Engelkemeir, D. W.)—1818
Glendenning, Norman K. and Gustav Kramer. Nucleon-nucleon triplet-even potentials—2159
Goldberger, M. L. (see Blankenbecler, R.)—766
Goldemberg, J. (see Moscati, G.)—1098
Goldenberg, H. Mark (see Kleppner, Daniel)—603
Goldring, G. (see Birk, M.)—426
Goldstein, B. and J. J. Dropkin. Infrared sensitivity of ZnS:Cu:Co phosphor—966
González, L., A. Trier, and J. J. van Loef. Excitation function of reaction $Ti^{47}(n,p)Sc^{47}$ at neutron energies between 2.2 and 3.6 MeV—271
Gordon, Glen E. (see Thomas, T. Darrah)—1805
Gordon, Robert B. (see Bauer, Charles L.)—73
Gordon, W. L. (see Joseph, A. S.)—489
Goritchev, P. A., V. F. Darovskikh, O. V. Lozhkin, A. I. Obukhov, N. A. Perfilov, and U. P. Jakovlev. Investigation of light fragmentation products and peculiarities of nuclear fission at high energies of incident particles—2196
Gorman, David (see Montgomery, David)—2261(E)
Green, Ben A., Jr. Size effect in electrical resistivity of alloys—1402
Gross, Bernhard and R. J. de Moraes. γ irradiation effects on electrets—930
Grossweiner, L. I. (see Costikas, A.)—1410
Grover, J. Robb. Nuclear reactions of Ta with 5.7-GeV protons—1540
Gruhn, C. R. (see Bodansky, D.)—1082
Guenther, R. A. (see Lounasmaa, O. V.)—1357
Gunnink, Ray and A. W. Stoner. Decay studies of even-even isotopes, Er^{172} and Dy^{166}—642
Günther, Marian. Relativistic Lee model—2261(E)
Gupta, K. P. (see Cheng, C. H.)—2030
Gupta, Rajendra (see Joshi, S. K.)—933
Guth, Eugene. New class of classical uncertainty relations giving uncertainty for long and certainty for short times—1213

Haering, R. R. (see Dumke, W. P.)—1974
Halpern, I. (see Bodansky, D.)—1082
Halpern, O. (see Dickinson, W. C.)—632
Hammersley, J. M. (see Frisch, H. L.)—949
Handler, Paul. Surface conductivity of cleaved Si surfaces—971
Handy, Robert M. Electrode effects on Al_2O_3 tunnel junctions—1968
Hanna, J. (see St. Romain, F. A.)—1794
Hardie, G. (see Salisbury, S. R.)—2143
Harrison, Walter A. Band structure and Fermi surface of Zn—497
Hart, E. L., R. J. Louttit, D. Luers, T. W. Morris, W. J. Willis, and S. S. Yamamoto. Multiple meson production in proton-proton collisions at 2.85 BeV—747
Hart, H. R., Jr. (see Giaever, I.)—941
Harvey, Bernard G. (see Morton, John R., III)—1798
Hastings, J. M. and L. M. Corliss. Magnetic structure of $MnCr_2O_4$—556
Hearn, A. C. and E. Leader. Fixed-angle dispersion relations for nucleon Compton scattering. I—789
Hedgcock, F. T. (see Collings, E. W.)—1654
Hemkar, M. P. (see Joshi, S. K.)—1687
Hempstead, C. F. (see Forrester, P. A.)—923
Hines, Arthella P. and John S. Ross. Isotope shift in spectrum of Os—2105
Hobbie, Russell K. and Fred F. Forbes. Differential cross sections for reactions $C^{12}(Li^6,\alpha)N^{14}$ and $C^{12}(Li^7,\alpha)N^{15}$—2137
Holcomb, D. F. (see Ohlsen, W. D.)—1953
Holloway, W. W., Jr., E. Lüscher, and R. Novick. Hfs of atomic N—2109
Howarth, L. E. (see Spitzer, W. G.)—1710
Huizenga, J. R., R. Chaudhry, and R. Vandenbosch. He-ion-induced fission of Bi, Pb, Tl, and Au—210
—— (see Chaudhry, R.)—220
Hull, A. W. Cathode spot—1603

Hull, M. H., Jr. (see Lassila, K. E.)—881
Hulubei, H., N. Martalogu, J. Frantz, M. Ivascu, N. Scintei, A. Berinde, and I. Neamu. $S^{32}(p,p'\gamma)$ angular correlations from 5.7 to 6.34 MeV—2174

Iizuka, Jugoro and Reinhard Oehme. Model of pionic hyperon decay—787
Inglis, D. R. Heavy-particle stripping and structure of N^{14}—1789
Ivascu, M. (see Hulubei, H.)—2174
Iwamoto, Fumiaki and Katuro Sawada. Stability of plane wave Hartree-Fock ground state—887

Jahn, Helmut. Pion-nucleon processes above first maximum according to strong-coupling method—824
Jakovlev, U. P. (see Goritchev, P. A.)—2196
Jayaraman, A. (see Kennedy, G. C.)—1363
Jen, C. K., V. A. Bowers, E. L. Cochran, and S. N. Foner. Electron spin resonance of alkali atoms in inert-gas matrices—1749
Joenk, R. J. Theory of exchange resonance in antiferromagnetic $CuCl_2 \cdot 2H_2O$—565
Johnson, C. E., W. Marshall, and G. J. Perlow. Electric quadrupole moment of 14.4-keV state of Fe^{57}—1503
Johnson, C. M. P. (see Beall, E. F.)—1554
Johnson, L. F., G. D. Boyd, K. Nassau, and R. R. Soden. Continuous operation of solid-state optical maser—1406
Johnson, W. R., C. O. Carroll, and C. J. Mullin. Radiative corrections to Coulomb scattering asymmetry function—352
Jones, Lawrence W. (see Peck, C. Clyde)—1836
Jones, R. E. (see Chang, G. K.)—2055
—— (see Toxen, A. M.)—919
Joseph, A. S. and W. L. Gordon. Low-field de Haas-van Alphen effect in Zn—489
Joseph, D. W. Coordinate covariance and particle spectrum—319
Joshi, S. K. and Rajendra Gupta. Dispersion of phonons in AgCl—933
—— **and M. P. Hemkar.** Vibrational spectrum of Na—1687
—— **and B. M. S. Kashyap.** Electrical and thermal resistivities and Fermi surface of monovalent metals—936
Juretschke, Hellmut J. (see Coren, Richard L.)—1378

Kaiser, W. (see Wood, D. L.)—2079
Kalbfleisch, George R. (see Button, Janice)—1858
Kaminsky, Manfred. Sputtering experiments in Rutherford collision region—1267
Kanazawa, A. (see Sugawara, M.)—2251
Kane, J. V. (see Lowe, J.)—1811
Kanter, H. and E. J. Sternglass. Interpretation of range measurements for kV electrons in solids—620
Kaplan, T. A. (see Lyons, D. H.)—540
Karayianis, N., C. A. Morrison, and D. E. Wortman. Long-range order of linear antiferromagnetic chain—1443
Karzas, W. J. and R. Latter. Electromagnetic radiation from nuclear explosion in space—1919
Kashyap, B. M. S. (see Joshi, S. K.)—936
Katayama, Mikio. Double quantum transition in electron spin resonance of γ-irradiated acetyl-*d*, *l*-alanine—1440
Katcoff, S. (see Baker, E. W.)—729
Kattawar, G. W. and M. Eisner. Nuclear magnetic relaxation of three-spin asymmetric molecule in liquid—1054
Kauffman, J. W. (see Kloske, R.)—122
Kaufman, Sheldon. Isobaric yields in reactions of 2.9-BeV protons with As^{75}—1189
Keffer, Frederic. Moriya interaction and problem of spin arrangements in βMnS—896
Keller, Joseph M. and Duane C. Wallace. Anharmonic contributions to specific heat—1275
Kelley, J. G., F. E. Steigert, and W. W. Watson. Scattering of O ions from Ar and Xe—2100
Kennedy, G. C., A. Jayaraman, and R. C. Newton. Fusion curve and polymorphic transitions of Cs at high pressures—1363
Kennedy, J. and T. D. Spearman. Singularities in partial-wave amplitudes for two ingoing and two outgoing particles—1596
Kenney, V. P., W. D. Shephard, and C. D. Gall. Single neutral pion production by pions at 1100 MeV—736
Kenty, Carl. Volume recombination, constriction, and volt-ampere characteristics of positive column—1235
Khubchandani, P. G., R. R. Sharma, and T. P. Das. Theory of quadrupole polarizability and antishielding of nuclear quadrupole moments of many-electron ions—594
Kiel, A. Temperature-dependent linewidth of excited states in crystals. I. Line broadening due to adiabatic variation of local fields—1292
Kim, Yongduk. Production of pion pairs by photon in Coulomb field of nucleus—345
Kingsley, J. D. and J. S. Prener. Spectroscopy and luminescence properties of CdF_2:Eu—458
Kinsey, K. F. (see Miyake, K.)—2188
Kirz, Janos, Joseph Schwartz, and Robert D. Tripp. $I=2$ *s*-wave π-π scattering length—763
Kisliuk, P. (see Geschwind, S.)—1684
Kissinger, P. B. and R. T. Weidner. Saturation effects in moderately diluted cesium chromium alum—506
Klein, M. P. (see Geschwind, S.)—1684
Kleinman, D. A. Nonlinear dielectric polarization in optical media—1977
—— (see Spitzer, W. G.)—1710
Kleppner, Daniel, H. Mark Goldenberg, and Norman F. Ramsey. Theory of hydrogen maser—603
Kloske, R. and J. W. Kauffman. Quenching studies of Au-Ag alloy—123
Knapp, D. E. (see Miyake, K.)—2188
Knapp, Edward A. (see Caris, John C.)—295
Koehler, W. C., J. W. Cable, E. O. Wollan, and M. K. Wilkinson. Magnetic structures of Tm—1672
Koester, L. J., Jr. (see Beall, E. F.)—1554
Kohn, W. (see Woll, E. J., Jr.)—1693
Komar, Arthur. Indeterminate character of reduction of wave packet in quantum theory—365
Koster, G. F. (see Slater, J. C.)—1307
Kramer, Gustav (see Glendenning, Norman K.)—2159
Królikowski, Wojciech. General formalism obeying intrinsic exclusion principle—1195

Laidler, J. B. (see Watt, D. E.)—264
Lam, D. J. (see Van Ostenburg, D. O.)—938
Lane, R. O., A. J. Elwyn, and A. Langsdorf, Jr. Polarization and differential cross section for neutron scattering from Si—1105
Langsdorf, A., Jr. (see Lane, R. O.)—1105
Lassila, K. E., M. H. Hull, Jr., H. M. Ruppel, F. A. McDonald, and G. Breit. Note on nucleon-nucleon potential—881
Latimer, Robert M. (see Thomas, T. Darrah)—1805
Latter, R. (see Karzas, W. J.)—1919
Leader, E. (see Hearn, A. C.)—789
Lee, Juliet (see Bardon, Marcel)—1826
Lee, T. D. and C. N. Yang. High-energy neutrino reactions without production of intermediate bosons—2239
Leffler, R. G. and D. J. Montgomery. Effect of isotopic composition on electrical resistance of Li—53
Lehmann, P., R. Taylor, and Richard Wilson. Electron-proton scattering at low momentum transfers—1183
Lichten, William. Metastable H_2 molecules. II. Fine structure of parahydrogen—1020
Lieber, A. J., F. H. Schmidt, and J. B. Gerhart. Proton angular distributions for (α,p) reactions on C^{12}, Al^{27}, and P^{31}—1496

Lifson, H. (see Pekeris, C. L.)—1057
Lillethun, E. (see Cocconi, G.)—277
Lindgren, Ingvar P. K. (see Cabezas, Amado Y.)—1004
Lipkin, H. J., M. Peshkin, and L. J. Tassie. Flux quantization and current-carrying state in superconducting cylinder—116
Liu, L. Effects of spin-orbit coupling in Si and Ge—1317
Loscoe, C. (see Gärtner, W. W.)—1680
Lounasamaa, O. V. Specific heat of Sm metal between 0.4° and 4°K—1352
—— **and R. A. Guenther.** Specific heat of Dy metal between 0.4° and 4°K—1357
Louttit, R. J. (see Hart, E. L.)—747
Lowe, J., C. L. McClelland, and J. V. Kane. Lifetimes of first excited states of C^{15} and B^{10}—1811
Lozhkin, O. V. (see Goritchev, P. A.)—2196
Ludwig, G. W. (see Woodbury, H. H.)—466
Luers, D. (see Hart, E. L.)—747
Lurio, Allen. Hfs of ^3P states of Zn^{67} and Mg^{25}—1768
——, **M. Mandel, and R. Novick.** Second-order hyperfine and Zeeman corrections for (sl) configuration—1758
Lüscher, E. (see Holloway, W. W., Jr.)—2109
Lynch, Gerald R. (see Button, Janice)—1858
Lynton, Ernest A. and David McLachlan. Boundary scattering effects on superconducting transition temperature of In—40
—— (see Gayley, R. I., Jr.)—43
Lyons, D. H., T. A. Kaplan, K. Dwight, and N. Menyuk. Classical theory of ground spin-state in cubic spinels—540

MacDowell, S. W., A. L. L. Videira, and N. Zagury. Production and spin of K^* resonance—878
Macfarlane, Ronald D. α-emitting isomeric state of Tb^{149}—274
Maglić, Bogdan C. (see Button, Janice)—1858
Mahanthappa, Kalyana T. Multiple production of photons in quantum electrodynamics—329
Mahendroo, P. P. and A. W. Nolle. Nuclear magnetic relaxation in ionic crystals at high temperatures—125
Majumdar, S. Datta. Wave equations in curved space-time—2227
Mandel, M. (see Lurio, A.)—1758
Mandelstam, Stanley (see Chew, Geoffrey F.)—1202
Manning, G. (see Cocconi, G.)—277
Many, A. and G. Rakavy. Theory of transient space-charge-limited currents in solids in presence of trapping—1980
——, **S. Z. Weisz, and M. Simhony.** Space-charge-limited currents in iodine single crystals—1989
Mapleton, Robert A. Electron capture from atomic H by protons—1477
Mapother, D. E. Thermodynamic consistency of critical field and specific heat data for superconducting Sn and In—2021
Maradudin, A. A. and P. A. Flinn. Debye-Waller factor for Mössbauer resonant impurity atoms—2059
——, **P. A. Flinn, and S. Ruby.** Velocity shift of Mössbauer resonance—9
March, N. H. and A. M. Murray. Enhancement of electron density around positive point charges in metals and lifetimes of positrons—1480
Marcus, J. A. (see Reed, W. A.)—1298
Marino, Lawrence L. (see Rothe, Erhard W.)—598
Marr, Robert B. (see Durand, Loyal, III)—1882
Marrus, Richard (see Cabezas, Amado Y.)—1004
Marshak, H. (see Postma, Hans)—979
Marshall, W. (see Johnson, C. E.)—1503
Martalogu, N. (see Hulubei, H.)—2174
Martin, Jerry B. (see Cooper, John W.)—1482
Marton, L., J. Arol Simpson, H. A. Fowler, and N. Swanson. Plural scattering of 20-keV electrons in Al—182
Masuda, Yoshika. Nuclear spin-lattice relaxation in superconducting Al alloys—1271
Maximon, L. C. and Haakon Olsen. Measurement of photon polarization by pair production—310
Maxwell, J. R. (see Parkinson, W. C.)—1160
McCarthy, A. L. (see Cohen, B. L.)—698
McClelland, C. L. (see Lowe, J.)—1811
McClure, J. W. (see Anderson, J. D.)—2170
McDonald, F. A. (see Lassila, K. E.)—881
McGowan, F. K. and P. H. Stelson. Coulomb excitation of second 2+ states in Ge^{74}, Ge^{76}, Se^{78}, and Se^{80}—257
McLachlan, David (see Lynton, Ernest A.)—40
McWeeny, R. Perturbation theory for Fock-Dirac density matrix—1028
Meadows, J. W. and J. F. Whalen. Energy dependence of prompt $\bar{\nu}$ for neutron-induced fission of U^{235}—197
Meeron, Emmanuel. Indirect exponential coupling in classical many-body problems—883
Megerle, K. (see Giaever, I.)—941
Megill, Lawrence R. (see Carleton, Nathaniel P.)—2089
Mencuccini, C., R. Querzoli, and G. Salvini. Polarization of recoil proton from neutral photoproduction at 800 and 910 MeV—1181
Menyuk, N. (see Lyons, D. H.)—540
Merz, E. R. and A. A. Caretto, Jr. Recoil behavior of Cu^{65}-$(p,pn)Cu^{64}$ reaction—1173
Mette, H. (see Gärtner, W. W.)—1680
Meyer, L., H. T. Davis, Stuart A. Rice, and R. J. Donnelly. Mobility of ions in liquid He^4I and He^3 as a function of pressure and temperature—1927
Meyer, S. L. (see Fitch, V. L.)—1849
Meyerhofer, Dietrich, George A. Brown, and H. S. Sommers, Jr. Degenerate Ge. I. Tunnel, excess, and thermal current in tunnel diodes—1329
Miller, Robert C. (see Spitzer, W. G.)—1710
Miller, S. R., R. Blinc, M. Brenman, and J. S. Waugh. Nuclear spin-lattice relaxation in some ferroelectric ammonium salts—528
Milton, J. C. D. (see Bowman, Harry R.)—2120
Mitra, S. K. (see Bhattacherjee, S. K.)—1154
Mittleman, M. H. Formal theory of rearrangement collisions. II—373
—— **and Robert Pu.** Optical potential for closely coupled states—370
Miyake, K., K. F. Kinsey, and D. E. Knapp. $\pi^- + p \rightarrow \pi^0 + n$ charge exchange cross sections at 20.7 and 31.0 MeV—2188
Mock, J. B. (see Peter, M.)—1395
Montgomery, D. J. (see Leffler, R. G.)—53
Montgomery, David and David Gorman. Landau damping to all orders—2261(E)
Moore, T. W. and F. W. Spong. Cyclotron resonance in Al—2261(E)
Morel, Pierre and Philippe Nozières. Lifetime effects in condensed He^3—1909
Morris, T. W. (see Hart, E. L.)—747
Morrison, C. A. (see Karayianis, N.)—1443
Morton, John R., III, and Bernard G. Harvey. Application of recoil techniques to study of reactions $Ra^{226}(\alpha,4n)Th^{226}$, $Pb^{208}(\alpha,2n)Po^{210}$, and $Pb^{207}(\alpha,n)Po^{210}$—1798
Moscati, G. and J. Goldemberg. Delayed neutron yields in photofission of U^{238} and Th^{232}—1098
Moshinsky, M. Soluble many-body problem for particles in Coulomb potential—1880
Motz, Lloyd. Quantization and classical Hamilton-Jacobi equation—378
Mullin, C. J. (see Johnson, W. R.)—352
—— (see Weber, T. A.)—615
Murphy, P. G. (see Beall, E. F.)—1554
Murray, A. M. (see March, N. H.)—1480

Nakanishi, Noboru. Proof of partial-wave dispersion relations in perturbation theory—1225
Nardelli, G. F. and N. Tettamanzi. Dynamics of cubic crystals with local change of mass—1283
Nassau, K. (see Johnson, L. F.)—1406

Nauenberg, M. and A. Pais. Woolly cusps—360
Neamtan, S. M., G. Darewych, and G. Oczkowski. Annihilation of positrons from H^-e^+ ground state—193
Neamu, I. (see Hulubei, H.)—2174
Nereson, N. (see Arnold, G.)—2262(E)
Nesbet, R. K. Theory of superconductivity. I. Electron-lattice interaction—2014
Nethaway, David R. (see Wahl, Arthur C.)—1112
Newton, R. C. (see Kennedy, G. C.)—1363
Neynaber, R. H. (see Rothe, Erhard W.)—598
Nielsen, H. L. (see Gallagher, C. J., Jr.)—1520
Nierenberg, William A. (see Cabezas, Amado Y.)—1004
Ninio, F. Field dependence of electric susceptibility of ionic crystals—962
Nishijima, K. Unitarity condition and anomalous vertex functions—852
Nobles, Ralph A. Long-range particles from nuclear fission—1508
Nolle, A. W. (see P. P. Mahendroo, P. P.)—125
Norton, Richard E. K^* and K meson pole contributions to leptonic Λ decay—1216
Novick, R. (see Holloway, W. W., Jr.)—2109
—— (see Lurio, A.)—1758
—— (see Thaddeus, P.)—1774
Nowick, A. S. (see Dreyfus, R. W.)—1367
Nowik, I. Influence of resonant absorber whose thickness varies linearly with time on special shape of incident Lorentzian wave packet—1878
Noyes, H. Pierre (see Wong, David W.)—1866
Nozières, Philippe (see Morel, Pierre)—1909

Obukhov, A. I. (see Goritchev, P. A.)—2196
O'Connell, J. S., P. Tipler, and P. Axel. Elastic scattering of 11.5–17.7-MeV photons by Au measured with a bremsstrahlung monochromator—228
Oczkowski, G. (see Neamtan, S. M.)—193
Oehme, Reinhard (see Iizuka, Jugoro)—787
Ohlsen, W. D. and D. F. Holcomb. Low-temperature paramagnetic relaxation of color centers in KCl—1953
Olsen, Haakon (see Maximon, L. C.)—310
Oppliger, L. (see Salisbury, S. R.)—2143
Orbach, R. Spin-lattice relaxation time of Sm ethyl sulfate—1349

Pais, A. (see Nauenberg, M.)—360
Palsedge, John A. (see Boley, Forrest I.)—734
Pankove, J. I. and P. Aigrain. Optical absorption of As-doped degenerate Ge—956
Pappas, A. C. (see Rudstam, G.)—1852
Paranjape, B. V. and Benjamin U. Stewart. Role of *e-e* collisions in galvanomagnetic effects—1668
Parkinson, W. C. and J. R. Maxwell. Gross structure and 1*d*-shell nuclei—1160
Passell, L. (see Dickinson, W. C.)—632
Paul, David I. Interaction of antiferromagnetic spin waves with Bloch wall—78
Pearson, J. J. Anisotropic superexchange in βMnS—901
Pearson, J. M. Induced pseudoscalar interaction and low-energy anomalies in β spectra—1100
Peck, C. Clyde, Lawrence W. Jones, and Martin L. Perl. Evidence concerning pion-pion interactions below 765-MeV pion-pion resonance—1836
Pekeris, C. L. $1\,^1S$, $2\,^1S$, and $2\,^3S$ states of H^- and of He—1470
—— $1\,^1S$, $2\,^1S$, and $2\,^3S$ states of Li^+—143
——, **B. Schiff, and H. Lifson.** Fine structure of $2\,^3P$ and $3\,^3P$ states of He—1057
Perez-Mendez, Victor (see Caris, John C.)—295
Perfilov, N. A. (see Goritchev, P. A.)—2196
Perkins, J. F. Monte Carlo calculation of transport of fast electrons—1781
Perkins, Walton A. (see Caris, John C.)—295
Perl, Martin L. (see Peck, C. Clyde)—1836
Perlow, G. J. (see Johnson, C. E.)—1503
Peshkin, M. (see Lipkin, H. J.)—116
Peter, M., D. Shaltiel, J. H. Wernick, H. J. Williams, J. B. Mock, and R. C. Sherwood. Paramagnetic resonance of *S*-state ions in metals—1395
Petersen, F. Russell and Howard A. Shugart. Nuclear spin, hfs, and nuclear moments of 6.8-day Lu^{177}—252
Peterson, Robert L. (see Schieve, William C.)—1458
Piroué, P. A. (see Fitch, V. L.)—1849
Plano, R. (see Samios, N. P.)—1844
Postma, Hans, H. Marshak, V. L. Sailor, F. J. Shore, and C. A. Reynolds. Transmission of polarized neutrons through samples of polarized Ho^{165} nuclei—979
Powers, D. and W. Whaling. Range of heavy ions in solids—61
Prener, J. S. (see Kingsley, J. D.)—458
Primakoff, H. (see Dreitlein, J.)—375
Prodell, A. (see Samios, N. P.)—1844
Pu, Robert (see Mittleman, M. H.)—370

Querzoli, R. (see Mencuccini, C.)—1181
Quinn, John J. Range of excited electrons in metals—1453

Radford, H. E. Microwave Zeeman effect of free hydroxyl radicals: $^2\Pi_{\frac{1}{2}}$ levels—1035
Rahman, A., K. S. Singwi, and A. Sjölander. Stochastic model of liquid and cold neutron scattering. II—997
——, **K. S. Singwi, and A. Sjölander.** Theory of slow neutron scattering by liquids. I—986
Rakavy, G. (see Many, A.)—1980
Ramsey, Norman F. (see Kleppner, Daniel)—603
Reddoch, A. H. and G. J. Ritter. Nuclear magnetic resonance of Lu^{176}—1493
Reed, W. A. and J. A. Marcus. Topology of Fermi surface of Ga—1298
Reik, H. O. and H. Risken. Drift velocity and anisotropy of hot electrons in *n* Ge—1737
Reines, F. (see Giamati, C. C.)—2178
Remeika, J. P. (see Geschwind, S.)—1684
Reynolds, C. A. (see Postma, Hans)—979
Rice, Stuart A. (see Meyer, L.)—1927
Richards, H. T. (see Salisbury, S. R.)—2147
Richards, P. L. Magnetic field dependence of surface impedance of superconducting Sn at 3 kMc/sec—912
Richardson, J. Reginald. (see Catura, Richard C.)—646
Risken, H. (see Reik, H. O.)—1737
Ritchie, R. H. and H. B. Eldridge. Optical emission from irradiated foils. I—1935
Ritter, George J. Hfs and nuclear moments of Lu^{178}—240
—— (see Reddoch, A. H.)—1493
Robbins, C. R. (see Fang, P. H.)—892
Robinson, Ivor (see Bergmann, Peter G.)—1227
Rodbell, D. S. (see Bean, C. P.)—104
Rol, P. K. (see Rothe, Erhard W.)—598
Rosen, L. and L. Stewart. Neutron-induced disintegrations of Li^6 and Li^7—1150
Rosenbaum, M. (see Aamodt, R.)—1165
Rosenfeld, Arthur H. (see Button, Janice)—1858
Ross, John S. (see Hines, Arthella P.)—2105
Ross, Marc H. (see Shaw, Gordon L.)—806; 814
Rothe, Erhard W., Lawrence L. Marino, R. H. Neynaber, P. K. Rol, and S. M. Trujillo. Scattering of thermal rare gas beams by Ar. Influence of long-range dispersion forces—598
Ruby, S. L. (see Maradudin, A. A.)—9
—— (see Shirane, G.)—49
Rudstam, G., E. Bruninx, and A. C. Pappas. Spallation of Cu with 24-GeV protons—1852

Rupp, L. W., Jr. (see Walsh, W. M., Jr)—952
Ruppel, H. M. (see Lassila, K. E.)—881
Russek, Arnold, Charles H. Sherman, and David E. Flinchbaugh. Simple, analytic, atomic wave functions—573

Sachs, R. G. High-energy behavior of nucleon-electromagnetic form factors—2256
Sailor, V. L. (see Postma, Hans)—979
Salisbury, S. R., G. Hardie, L. Oppliger, and R. Dangle. p-O^{16} differential scattering cross sections. II—2143
—— **and H. T. Richards.** F^{17} level parameters—2147
Salvini, G. (see Mencuccini, C.)—1181
Samios, N. P., R. Plano, A. Prodell, M. Schwartz, and J. Steinberger. Parity of neutral pion and decay $\pi^0 \rightarrow 2e^+ + 2e^-$—1844
Saunders, Edward M. Ground state of solid He^3—1724
Sawada, Katuro (see Iwamoto, Fumiaki)—887
Sawicki, J. Higher random phase approximation and energy spectra of spherical nuclei—2231
Scanlon, W. W. Precipitation of Te and Pb in PbTe crystals—509
Schey, Harry M. (see Burke, Philip)—147; 163
Schieve, William C. and Robert L. Peterson. Correlation function calculation of thermal conductivity—1458
Schiff, B. (see Pekeris, C. L.)—1057
Schiller, Ralph and Melvin Schwartz. Structure-independent electrodynamics in electric dipole approximation—1582
Schmidt, F. H. (see Lieber, A. J.)—1496
Schmidt, George and David Finkelstein. Magnetically confined plasma with Maxwellian core—1611
Schmidt, V. Hugo and Edwin A. Uehling. Random motion of deuterons in KD_2PO_4—447
Schücking, Engelbert (see Bergmann, Peter G.)—1227
Schumacher, David P. Polymorphic transition in LiH—1679
Schwartz, Charles. Importance of angular correlations between atomic electrons—1015
Schwartz, Joseph (see Kirz, Janos)—763
Schwartz, Melvin (see Samios, N. P.)—1844
Schwartz, Melvin (see Schiller, Ralph)—1582
Scintei, N. (see Hulubei, H.)—2174
Seaborg, Glenn T. (see Thomas, T. Darrah)—1805
Serin, B. (see Gayley, R. I., Jr.)—43
Shaltiel, D. (see Peter, M.)—1395
Shamu, R. E. (see Austin, S. M.)—1532
Sharma, R. R. (see Khubchandani, P. G.)—594
Sharp, David H. (see Baierlein, Ralph F.)—1864
Shaw, Gordon L. and Marc H. Ross. Analysis of multichannel reactions—806
—— **and Marc H. Ross.** Effective range analysis of S-wave K^-p reactions—814
Shephard, W. D. and W. D. Walker. $\pi^- - p$ interaction at 1.3 BeV—278
—— (see Kenney, V. P.)—736
Sherman, Charles H. (see Russek, Arnold)—573
Sherwood, R. C. (see Peter, M.)—1395
Shirane, G., W. J. Takei, and S. L. Ruby. Mössbauer study of hyperfine fields and isomer shifts in Fe_4N and $(Fe,Ni)_4N$—49
Shore, F. J. (see Postma, Hans)—979
Shugart, Howard A. (see Petersen, F. Russell)—252
Simhony, M. (see Many, A.)—1989
Simpson, J. Arol (see Marton, L.)—182
Singh, Virendra and Bhalchandra M. Udgaonkar. Self-consistent model for nonleptonic decays of Σ and Λ hyperons—2248
Singwi, K. S. (see Rahman, A.)—986; 997
Sjölander, A. (see Rahman, A.)—986; 997
Skurnik, E. Z. (see Birk, M.)—726
Slack, Glen A. Thermal conductivity of MgO, Al_2O_3, $MgAl_2O_4$, and Fe_3O_4 crystals from 3°K and 300°K—427
Slater, J. C., G. F. Koster, and J. H. Wood. Symmetry and free electron properties of Ga energy bands—1307
Slobodrian, R. J. Stripping with 28-MeV deuterons—1059
Smith, Alan B. Elastic and inelastic scattering of fast neutrons from Th^{232}—718
Soden, R. R. (see Johnson, L. F.)—1406
Sokolowski, J. S. (see Birk, M.)—726
Sommers, H. S., Jr. (see Meyerhofer, Dietrich)—1329
Sosin, A. Energy dependence of electron damage in Cu—1698
Spearman, T. D. (see Kennedy, J.)—1596
Spitzer, W. G., Robert C. Miller, D. A. Kleinman, and L. E. Howarth. Far infrared dielectric dispersion in $BaTiO_3$, $SrTiO_3$, and TiO_2—1710
Spong, F. W. (see Moore, T. W.)—2261(E)
Starke, E. A., Jr., C. H. Cheng, and Paul A. Beck. Low-temperature specific heat of Ti alloys with CsCl-type ordered structure—1746
Steigert, F. E. (see Kelley, J. G.)—2100
Steinberger, J. (see Samios, N. P.)—1844
Stelson, P. H. (see McGowan, F. K.)—257
Stephens, W. E. (see Del Bianco, W. E.)—709
Sternglass, E. J. (see Kanter, H.)—620
Stevenson, M. Lynn (see Button, Janice)—1855
Stewart, Benjamin U. (see Paranjape, B. V.)—1668
Stewart, L. (see Rosen, L.)—1150
Stewart, M. G. (see Clikeman, F. M.)—1822
Stillinger, Frank H., Jr. Some remarks on correlations in classical order-disorder phenomena—1239
Stoner, A. W. (see Gunnink, Ray)—642
Stratton, R. Diffusion of hot and cold electrons in semiconductor barriers—2002
Streever, Ralph L., Jr. (see Bennett, Lawrence H.)—2141
Strnad, J. Momentum distributions for protons in Li^6 in cluster model—2262(E)
St. Romain, F. A., T. W. Bonner, R. L. Bramblett, and J. Hanna. Low-energy neutrons from reaction $Be^9(\alpha,n)C^{12}$—1794
Sugawara, M. and A. Kanazawa. N/D method—2251
Swann, W. F. G. General approach to electromagnetic origin of cosmic-ray energy—757
Swanson, N. (see Marton, L.)—182
Swiatecki, Wladyslaw J. (see Bowman, Harry R.)—2120
Szász, Levente. Atomic many-body problem. I. General theory of correlated wave functions—169

Takei, W. J. (see Shirane, G.)—49
Talmi, Igal. Neutron $d_{\frac{5}{2}}^n$ configurations in Zr isotopes—2116
—— Seniority of $f_{7/2}^4$ levels in Cr^{52}—1096
Tassie, L. J. (see Lipkin, H. J.)—116
Taylor, A. E. (see Cocconi, G.)—277
Taylor, R. (see Lehmann, P.)—1183
Taylor, R. D. (see Frauenfelder, H.)—1065
Temkin, A. Nonadiabatic theory of electron-H scattering—130
Tettamanzi, N. (see Nardelli, G. F.)—1283
Thaddeus, P. and R. Novick. Optical detection of level crossing in $(5s5p)\ ^3P_1$ state of Cd^{111} and Cd^{113}—1774
Thirring, W. Lagrangian formulation of Zachariasen model—1209
Thomas, T. Darrah, Glen E. Gordon, Robert M. Latimer, and Glenn T. Seaborg. Spallation-fission competition in astatine compound nuclei formed by heavy-ion bombardment—1805
Thompson, Stanley G. (see Bowman, Harry R.)—2120
Tipler, P. (see O'Connell, J. S.)—228
Tobocman, W. and W. R. Gibbs. Distortion effects in $Ca^{40}(d,p)Ca^{41}$ reaction—1076
Toth, K. S. Angular distribution and ranges of N^{12} particles resulting from 27.5-MeV N^{14} ions on Mg^{24}—1489
Toxen, A. M., G. K. Chang, and R. E. Jones. Thermal conductivity of dilute In-Hg alloys—919
Trammell, G. T. Elastic scattering at resonance from bound nuclei—1045

Trapp, H. (see Van Ostenburg, D. O.)—938
Trehan, P. N. and D. M. Van Patter. Decay of 18-min Br^{80}—266
Trier, A. (see Gonzalez, L.)—271
Tripp, Robert D. (see Kirz, Janos)—763
Troutner, David E. (see Wahl, Arthur C.)—1112
Trujillo, S. M. (see Rothe, Erhard W.)—598
Tsang, Tung (see Connor, Donald)—1506

Überall, H. Bremsstrahlung accompanying high-energy π meson-proton collisions—861
—— Neutrino-induced reaction in C^{12}—876
—— Nuclear reactions induced by neutrinos of intermediate energy—1572
Udgaonkar, Bhalchandra M. (see Singh, Virendra)—2248
Uehling, Edwin A. (see Schmidt, V. Hugo)—447

Vandenbosch, R. (see Chaudhry, R.)—220
—— (see Huizenga, J. R.)—210
van Loef, J. J. (see Gonzalez, L.)—271
Van Ostenburg, D. O., H. Trapp, and D. J. Lam, Nuclear magnetic resonance of Tc^{99} in Tc metal and Tc^{99} and V^{51} in Tc-V alloys—938
Van Patter, D. M. (see Trehan, P. N.)—266
van Reuth, E. C. (see Cheng, C. H.)—2030
Verma, G. S. (see Agrawal, Bal Krishna)—24
Videira, A. L. L. (see MacDowell, S. W.)—878
Visscher, W. M. (see Frauenfelder, H.)—1065

Wahl, Arthur, Robert L. Ferguson, David R. Nethaway, David E. Troutner, and Kurt Wolfsberg. Nuclear-charge distribution in low-energy fission—1112
Walecka, J. D. Electromagnetic properties of low-lying states of $_6C_6^{12}$ in oscillating drop model—663
—— Electron scattering from quantized liquid drop—653
Walker, L. R. (see Dillon, J. F., Jr.)—2261(E)
Walker, T. G. (see Cocconi, G.)—277
Walker, W. D. (see Shephard, W. D.)—278
Wallace, Duane C. (see Keller, Joseph M.)—1275
Wallace, W. E. (see Zanowick, R. L.)—537
Walnut, Thomas H. Vibrational wave functions for anharmonic crystals—83
Walsh, W. M., Jr., and L. W. Rupp, Jr. Paramagnetic resonance of trivalent Fe^{57} in ZnO—952
Watson, W. W. (see Kelley, J. G.)—2100
Watt, D. E., F. J. Bannister, J. B. Laidler, and F. Brown. Spontaneous fission half-life of Pu^{240}—264
Waugh, J. S. (see Miller, S. R.)—528
Weber, T. A. and C. J. Mullin. Angular distribution of relativistic atomic K-shell photoelectrons—615
Weidner, R. T. (see Kissinger, P. B.)—506
Weinberg, Steven. Eikonal method in magnetohydrodynamics—1899
Weinstock, Jerome. Binary collision expansion of classical N-body Green's function—341
Weiser, K. Theory of diffusion and equilibrium position of interstitial impurities in diamond lattices—1427
Weisz, S. Z. (see Many, A.)—1989
Welsh, D. J. A. (see Frisch, H. L.)—949
Wenzel, W. A. (see Beall, E. F.)—1554
Wernick, J. H. (see Peter, M.)—1395
Wetherell, A. M. (see Cocconi, G.)—277
Whalen, J. F. (see Meadows, J. W.)—197
Whaling, W. (see Powers, D.)—61
Wheeler, John A. (see Baierlein, Ralph F.)—1864
Wiedenbeck, M. Total x-ray attenuation coefficients from 40 keV to 412 keV—1009
Wilkinson, D. H. Self-consistent determination of effective radii of heavy nuclei for α-particle emission—648
Wilkinson, M. K. (see Koehler, W. C.)—1672
Willey, Raymond S. Nuclear rotational spectra, Elliott model, and P_2 force—1127
Williams, Ferd E. Theory of defect formation in alkali halides by ionizing radiation—70
Williams, H. J. (see Peter, M.)—1395
Williams, Richard. Effect of high electric field on absorption of light by PbI_2 and HgI_2—442
Williams, Roscoe C. Quantum mechanical effects in stimulated optical emission—1011
Willis, W. J. (see Hart, E. L.)—747
Wilson, Richard (see Lehmann, P.)—1183
Winter, Rolf G. Large-time exponential decay and "hidden variables"—1152
Wolff, P. A. Theory of band structure of very degenerate semiconductors—405
Wolfsberg, Kurt (see Wahl, Arthur C.)—1112
Woll, E. J., Jr., and W. Kohn. Images of Fermi surface in phonon spectra of metals—1693
Wollan, E. O. (see Koehler, W. C.)—1672
Wong, C. (see Anderson, J. D.)—2170
Wong, David Y. Regge poles and resonances in strong interaction—1220
—— **and H. Pierre Noyes.** Electrostatic corrections to nucleon-nucleon dispersion relations—1866
Wood, D. L. and W. Kaiser. Absorption and fluorescence of Sm^{2+} in CaF_2, SrF_2, and BaF_2—2079
—— (see Geschwind, S.)—1684
Wood, J. H. Energy bands in Fe via augmented plane wave method—517
—— (see Slater, J. C.)—1307
Woodbury, H. H. and G. W. Ludwig. Spin resonance of Pd and Pt in Si—466
Wortman, D. E. (see Karayianis, N.)—1443
Wu, Tai Tsun. Perturbation theory of pion-pion interaction. II. Two-pion approximation—2219

Yamaguchi, S. Ferrimagnetic structure of magnetite crystal as revealed by electron diffraction—102
Yamamoto, S. S. (see Hart, E. L.)—747
Yang, C. N. (see Lee, T. D.)—2239
Yntema, J. L. (see Broek, H. W.)—1514
Young, James A. (see Bludman, Sidney A.)—303

Zachariasen, F. (see Frautschi, S. C.)—2204
Zagury, N. (see MacDowell, S. W.)—878
Zanowick, R. L. and W. E. Wallace. Ferromagnetism in EuH_2—537
Zeidman, B. (see Broek, H. W.)—1514
Zijlstra, H. (see Compaan, K.)—1722
Zimmerman, J. E. and L. T. Crane. Anomalous lattice specific heat of Au and Zn at liquid He temperatures—513
Zweifel, P. F. (see Aamodt, R.)—1165

Analytic Subject Index to Volume 126

References with (E) are to Errata. Items are listed under the following categories:

Acoustics
Astrophysics
Atomic and Molecular Beams
Atomic Mass and Abundance
Atomic Structure and Spectra
Biophysics
Chemical Effects and Properties
Constants, Standards, Units
Cosmic Radiation
Crystalline State
Dielectrics and Dielectric Properties
Diffraction
Diffusion
Elasticity and Plasticity
Electrical Conductivity and Resistance
Electrical Discharges
Electrical Properties
Electromagnetic Theory and Electrodynamics
Electrons and Positrons
Elementary Particle Interactions, General
Elementary Particle Interactions, Electromagnetic
Elementary Particle Interactions, Strong
Elementary Particle Interactions, Weak
Errata
Field Theory
Films, Properties
Fluid Dynamics
Gamma Rays
Gases
Geophysics
Helium, Liquid
Imperfections in Solids
Ionization
Ions
Ions and Electrons, Mobility
Liquids
Luminescence
Magnetic Properties
Magnetic Resonance
Mathematical Methods
Mechanics
Mesons and Hyperons
Methods and Instruments
Microwaves
Miscellaneous
Molecular Aggregates
Molecular Structure and Spectra
Neutrinos and Antineutrinos
Noise
Nuclear Fission
Nuclear Moments and Spin
Nuclear Photoeffects
Nuclear Reactions, General
Nuclear Reactions Induced by α Particles and He^3
Nuclear Reactions Induced by Deuterons and Tritons
Nuclear Reactions Induced by Mesons and Hyperons
Nuclear Reactions Induced by Neutrons and Antineutrons
Nuclear Reactions Induced by Protons and Antiprotons
Nuclear Spectra
Nuclear Structure Theory
Optical Properties
Plasma Physics
Quantum Electrodynamics
Quantum Mechanics
Radiation
Radioactivity
Range and Energy Loss
Relativity and Gravitation
Scattering, General
Scattering of α Particles and He^3
Scattering of Deuterons and Tritons
Scattering of Electrons and Positrons
Scattering of Mesons and Hyperons
Scattering of Neutrons
Scattering of Protons and Antiprotons
Semiconductors
Spectra, General
Statistical Mechanics and Thermodynamics
Superconductivity
Surface Physics
Thermal Properties
X Rays

Absorption of Radiation (see **Optical Properties; Radiation**)

Acoustics

Dispersion of phonons in AgCl, S. K. Joshi and Rajendra Gupta—933

Ultrasonic amplification in semimetals, W. P. Dumke and R. R. Haering—1974

Adsorption (see **Gases**)

Aerodynamics (see **Fluid Dynamics**)

Afterglow (see **Electrical Discharges**)

Alloys (see **Crystalline State**)

Annihilation (see **Electrons and Positrons; Elementary Particle Interactions**)

Antiferroelectric Phenomena (see **Dielectrics and Dielectric Properties**)

Antiferromagnetism (see **Magnetic Properties**)

Antineutrinos (see **Neutrinos and Antineutrinos**)

Antineutrons (see **Elementary Particle Interactions**)

Antiprotons (see **Elementary Particle Interactions**)

Arcs (see **Electrical Discharges**)

Astrophysics

β decay in stellar interiors, John N. Bahcall—1143

General approach to electromagnetic origin of cosmic-ray energy, W. F. G. Swann—757

Atmosphere (see **Geophysics**)

Atomic and Molecular Beams

Hfs of ^3P states of Zn^{67} and Mg^{25}, Allen Lurio—1768

Metastable H_2 molecules. II. Fine structure of parahydrogen, William Lichten—1020

Optical detection of level crossing in $(5s5p)\ ^3P_1$ state of Cd^{111} and Cd^{113}, P. Thaddeus and R. Novick—1774

Scattering of thermal rare gas beams by Ar. Influence of long-range dispersion forces, Erhard W. Rothe, Lawrence L. Marino, R. H. Neynaber, P. K. Rol, and S. M. Trujillo—598

Second-order hyperfine and Zeeman corrections for (sl) configuration, A. Lurio, M. Mandel, and R. Novick—1758

Theory of hydrogen maser, Daniel Kleppner, H. Mark Goldenberg, and Norman F. Ramsey—603

Atomic Mass and Abundance

Atomic Structure and Spectra

Angular distribution of relativistic atomic K-shell photoelectrons, T. A. Weber and C. J. Mullin—615

Annihilation of positrons from H^-e^+ ground state, S. M. Neamtan, G. Darewych, and G. Oczkowski—193

Atomic many-body problem. I. General theory of correlated wave functions, Levente Szász—169

Elastic scattering of low-energy electrons by atomic hydrogen, Philip Burke and Harry M. Schey—147

Fine structure of $2\ ^3P$ and $3\ ^3P$ states of He, C. L. Pekeris, B. Schiff, and H. Lifson—1057

Hfs and nuclear moments of Lu^{175}, George J. Ritter—240

Hfs of atomic nitrogen, W. W. Holloway, Jr., E. Lüscher, and R. Novick—2179

Hfs of Pr^{142}, Amado Y. Cabezas, Ingvar P. K. Lindgren, Richard Marrus, and William A. Nierenberg—1004

Hfs of ^3P states of Zn^{67} and Mg^{25}, Allen Lurio—1768

Importance of angular correlations between atomic electrons, Charles Schwartz—1015

Atomic Structure and Spectra (Continued)
Isotope shift in spectrum of Os, Arthella P. Hines and John S. Ross—2105
Nonadiabatic theory of electron-H scattering, A. Temkin—130
Nuclear spin, hfs, and nuclear moments of 6.8-day Lu^{177}, F. Russell Petersen and Howard A. Shugart
$1\,^1S$, $2\,^1S$, and $2\,^3S$ states of H^- and of He, C. L. Pekeris—1470
$1\,^1S$, $2\,^1S$, and $2\,^3S$ states of Li^+, C. L. Pekeris—143
Optical detection of level crossing in $(5s5p)\,^3P_1$ state of Cd^{111} and Cd^{113}, P. Thaddeus and R. Novick—1774
Polarization and correlation of electron spin in low-energy elastic electron-H collisions, P. G. Burke and H. M. Schey—163
Second-order hyperfine and Zeeman corrections for (sl) configuration, A. Lurio, M. Mandel, and R. Novick—1758
Simple, analytic, atomic wave functions, Arnold Russek, Charles H. Sherman, and David E. Flinchbaugh—573
Theory of quadrupole polarizability and antishielding of nuclear quadrupole moments of many-electron ions, P. G. Khubchandani, R. R. Sharma, and T. P. Das—594
Auger Effect (see **Atomic Structure and Spectra; Nuclear Spectra; X Rays**)
Aurora (see **Astrophysics; Geophysics**)

Barkhausen Effect (see **Magnetic Properties**)
Biophysics
Boson Theory (see **Field Theory**)
Bremsstrahlung (see **Radiation**)
Broadening of Spectral Lines (see **Atomic Structure and Spectra; Molecular Structure and Spectra; Spectra, General**)

Capture Cross Sections (see **Electrons and Positrons; Nuclear Reactions; Radiation**)
Čerenkov Effect (see **Radiation**)
Chemical Effects and Properties
Chemical Reactions (see **Chemical Effects and Properties**)
Chemiluminescence (see **Luminescence**)
Cold Emission (see **Electrical Properties**)
Colloids (see **Chemical Effects and Properties; Molecular Aggregates**)
Compton Effect (see **Radiation**)
Conductivity, Electrical (see **Electrical Conductivity and Resistance**)
Conductivity, Thermal (see **Thermal Properties**)
Constants, Standards, Units
Cosmic Radiation (see also **Mesons and Hyperons**)
Altitude dependence of longitudinal distribution of atmospheric Čerenkov radiation, Forrest I. Boley, John A. Palsedge, and James H. Baum—734
General approach to electromagnetic origin of cosmic-ray energy, W. F. G. Swann—757
Cosmology (see **Astrophysics; Relativity and Gravitation**)
Coulomb Excitation (see **Nuclear Reactions; Nuclear Spectra**)
Critical Potentials (see **Atomic Structure and Spectra; Molecular Structure and Spectra**)
Cross Section (see **Electrons and Positrons; Nuclear Reactions; Radiation; Scattering**)
Crystal Counters (see **Methods and Instruments**)
Crystalline State (see also **Electrical Properties; Imperfections in Solids; Magnetic Properties; Semiconductors; etc.**)
Anharmonic contributions to specific heat, Joseph M. Keller and Duane C. Wallace—1275
Anisotropic superexchange in βMnS, J. J. Pearson—901
Anomalous lattice specific heat of Au and Zn at liquid He temperatures, J. E. Zimmerman and L. T. Crane—513
Band structure and Fermi surface of Zn, Walter A. Harrison—497
Bloch electrons in magnetic field, E. I. Blount—1636
Bose-Einstein condensation of excitons, John M. Blatt, K. W. Böer, and Werner Brandt—1691
Certain general order-disorder models in limit of long-range interactions, George A. Baker, Jr.—2071
Continuous operation of solid-state optical maser, L. F. Johnson, G. D. Boyd, K. Nassau, and R. R. Soden—1406
Cooperative optical absorption in solids, D. L. Dexter—1962
Correlation function calculation of thermal conductivity, William C. Schieve and Robert L. Peterson—1458
Critical concentrations in magnetism, S. H. Charap—1393
Cyclotron resonance in Al, T. W. Moore and F. W. Spong—2261(E)
Debye-Waller factor for Mössbauer resonant impurity atoms, A. A. Maradudin and P. A. Flinn—2059
Dispersion of phonons in AgCl, S. K. Joshi and Rajendra Gupta—933
Dynamics of cubic crystals with local change of mass, G. F. Nardelli and N. Tettamanzi—1283
Effect of isotopic composition on electrical resistance of Li, R. G. Leffler and D. J. Montgomery—53
Effects of spin-orbit coupling in Si and Ge, L. Liu—1317
Electrical and thermal resistivities and Fermi surface of monovalent metals, S. K. Joshi and B. M. S. Kashyap—936
Energy bands in Fe via augmented plane wave method, J. H. Wood—517
Energy losses and collective excitations in crystal, Stanley Engelsberg—1262
Enhancement of electron density around positive point charges in metals and lifetimes of positrons, N. H. March and A. M. Murray—1480
Exchange interaction and Heisenberg's spin Hamiltonian, Tadashi Arai—471
Field dependence of electric susceptibility of ionic crystals, F. Ninio—962
Fusion curve and polymorphic transitions of Cs at high pressures, G. C. Kennedy, A. Jayaraman, and R. C. Newton—1363
Ground state of solid He^3, Edward M. Saunders—1724
Hyperfine interaction constants of F-center electron with lattice in alkali halides (with NaCl structure), T. E. Feuchtwang—1616
Images of Fermi surface in phonon spectra of metals, E. J. Woll, Jr., and W. Kohn—1693
Interaction of antiferromagnetic spin waves with Bloch wall, David I. Paul—78
Ionic conductivity of doped NaCl crystals, R. W. Dreyfus and A. S. Nowick—1367
Lattice thermal conductivity at low temperatures, Bal Krishna Agrawal and G. S. Verma—24
Long-range order of linear antiferromagnetic chain, N. Karayianis, C. A. Morrison, and D. E. Wortman—1443
Low-field de Haas-van Alphen effect in Zn, A. S. Joseph and W. L. Gordon—489
Low-temperature specific heat of bcc Ti-V alloys, C. H. Cheng, K. P. Gupta, E. C. van Reuth, and Paul A. Beck—2030
Low-temperature specific heat of Ti alloys with CsCl-type ordered structure, E. A. Starke, Jr., C. H. Cheng, and Paul A. Beck—1746
Magnetic disorder as first-order phase transformation, C. P. Bean and D. S. Rodbell—104
Magnetic structure of $MnCr_2O_4$, J. M. Hastings and L. M. Corliss—556
Maximum variational principle for conduction problems in magnetic field, and theory of magnon drag, M. Bailyn—2040
Monte Carlo estimates of percolation probabilities for various lattices, H. L. Frisch, J. M. Hammersley, and D. J. A. Welsh—949

Moriya interaction and problem of spin arrangements in βMnS, Frederic Keffer—896
Mössbauer study of hyperfine fields and isomer shifts in Fe_4N and $(Fe,Ni)_4N$, G. Shirane, W. J. Takei, and S. L. Ruby—49
Multiphonon processes occurring in first-order perturbation theory, E. Franzak and M. Bailyn—2033
Nonlinear dielectric polarization in optical media, D. A. Kleinman—1977
Nuclear magnetic relaxation in ionic crystals at high temperatures, P. P. Mahendroo and A. W. Nolle—125
Nuclear spin-lattice relaxation in some ferroelectric ammonium salts, S. R. Miller, R. Blinc, M. Brenman, and J. S. Waugh—528
Optical emission from irradiated foils. I, R. H. Ritchie and H. B. Eldridge—1935
Optical emission from irradiated foils. II, A. L. Frank, E. T. Arakawa, and R. D. Birkhoff—1947
Paramagnetic resonance of Tb^{3+} ions in $CaWO_4$ and CaF_2, P. A. Forrester and C. F. Hempstead—923
Polymorphic transition in LiH, David P. Schumacher—1679
Precipitation of Te and Pb in PbTe crystals, W. W. Scanlon—509
Quantum theory of dielectric constant in real solids, Stephen L. Adler—413
Quenching studies of Au-Ag alloy, R. Kloske and J. W. Kauffman—123
Random motion of deuterons in KD_2PO_4, V. Hugo Schmidt and Edwin A. Uehling—447
Role of orthogonalization in determination of valence states in crystals, E. Brown—421
Saturation effects in moderately diluted cesium chromium alum, P. B. Kissinger and R. T. Weidner—506
Sharp-line fluorescence, electron paramagnetic resonance, and thermoluminescence of Mn^{4+} in α-Al_2O_3, S. Geschwind, P. Kisliuk, M. P. Klein, J. P. Remeika, and D. L. Wood—1684
Solution of Schrödinger equation for a periodic lattice. II, Leonard Eyges—93
Some remarks on correlations in classical order-disorder phenomena, Frank H. Stillinger, Jr.—1239
Spectroscopy and luminescence properties of CdF_2:Eu, J. D. Kingsley and J. S. Prener—458
Spin-lattice relaxation time of Sm ethyl sulfate, R. Orbach—1349
Stability of plane wave Hartree-Fock ground state, Fumiaki Iwamoto and Katuro Sawada—887
Structure sensitivity of *F*-center generation by x rays at low temperatures, Charles L. Bauer and Robert B. Gordon—73
Symmetry and free electron properties of Ga energy bands, J. C. Slater, G. F. Koster, and J. H. Wood—1307
Temperature-dependent linewidth of excited states in crystals. I. Line broadening due to adiabatic variation of local fields, A. Kiel—1292
Theory of defect formation in alkali halides by ionizing radiation, Ferd E. Williams—70
Theory of exchange resonance in antiferromagnetic $CuCl_2 \cdot 2H_2O$, R. J. Joenk—565
Theory of superconductivity. I. Electron-lattice interaction, R. K. Nesbet—2014
Theory of valence band splittings at $k=0$ in zincblende and wurtzite structures, Stephen L. Adler—118
Thermal conductivity of MgO, Al_2O_3, $MgAl_2O_4$, and Fe_3O_4 crystals from 3°K and 300°K, Glen A. Slack—427
Thermal conductivity of solids. III. Modification of three-phonon processes by isotopic scattering, P. Carruthers—1448
3d band structure of Cr, M. Asdente and J. Friedel—2262(E)
Topology of Fermi surface of Ga, W. A. Reed and J. A. Marcus—1298
Velocity shift of Mössbauer resonance, A. A. Maradudin, P. A. Flinn, and S. Ruby—9
Vibrational spectrum of Na, S. K. Joshi and M. P. Hemkar—1687
Vibrational wave functions for anharmonic crystals, Thomas H. Walnut—83

Diamagnetism (see **Magnetic Properties**)
Dielectrics and Dielectric Properties
Dispersion of phonons in AgCl, S. K. Joshi and Rajendra Gupta—933
Far infrared dielectric dispersion in $BaTiO_3$, $SrTiO_3$, and TiO_2, W. G. Spitzer, Robert C. Miller, D. A. Kleinman, and L. E. Howarth—1710
Ferroelectricity in compound $Ba_2Bi_4Ti_5O_{18}$, Bengt Aurivillius and P. H. Fang—893
Ferroelectricity in compound $Bi_4Ti_3O_{12}$, P. H. Fang, C. R. Robbins, and Bengt Aurivillius—892
Field dependence of electric susceptibility of ionic crystals, F. Ninio—962
γ irradiation effects on electrets, Bernhard Gross and R. J. de Moraes—930
Nonlinear dielectric polarization in optical media, D. A. Kleinman—1977
Nuclear spin-lattice relaxation in some ferroelectric ammonium salts, S. R. Miller, R. Blinc, M. Brenman, and J. S. Waugh—528
Quantum theory of dielectric constant in real solids, Stephen L. Adler—413
Random motion of deuterons in KD_2PO_4, V. Hugo Schmidt and Edwin A. Uehling—447
Diffraction (see also **Scattering**)
Effect of thermal vibrations on diffraction from perfect crystals. I. Case of anomalous transmission, Boris W. Batterman—1461
Ferrimagnetic structure of magnetite crystal as revealed by electron diffraction, S. Yamaguchi—102
Magnetic structure of $MnCr_2O_4$, J. M. Hastings and L. M. Corliss—556
Magnetic structures of Tm, W. C. Koehler, J. W. Cable, E. O. Wollan, and M. K. Wilkinson—1672
Moriya interaction and problem of spin arrangements in βMnS, Frederic Keffer—896
Diffusion
Diffusion of slow electrons in gases, L. W. Cochran and D. W. Forester—1785
Theory of diffusion and equilibrium position of interstitial impurities in diamond lattices, K. Weiser—1427
Discharge of Electricity in Gases (see **Electrical Discharges**)
Disintegration and Excitation of Nucleus (see **Nuclear Reactions**)
Dynamics (see **Mechanics**)

Elasticity and Plasticity
Electrical Breakdown (see **Dielectrics and Dielectric Properties; Electrical Discharges**)
Electrical Conductivity and Resistance (see also **Electrical Properties; Semiconductors; Superconductors**)
Effect of isotopic composition on electrical resistance of Li, R. G. Leffler and D. J. Montgomery—53
Electrical and thermal resistivities and Fermi surface of monovalent metals, S. K. Joshi and B. M. S. Kashyap—936
Electrode effects on Al_2O_3 tunnel junctions, Robert M. Handy—1968
Energy dependence of electron damage in Cu, A. Sosin—1698
Ionic conductivity of doped NaCl crystals, R. W. Dreyfus and A. S. Nowick—1367
Linde's law and scattering power of associated point defects, C. P. Flynn—533

Electrical Conductivity and Resistance (Continued)
Magnetoresistance and domain structure in thin Ni films, Richard L. Coren and Hellmut J. Juretschke—1378
Maximum variational principle for conduction problems in magnetic field, and theory of magnon drag, M. Bailyn—2040
Multiphonon processes occurring in first-order perturbation theory, E. Franzak and M. Bailyn—2033
Quenching studies of Au-Ag alloy, R. Kloske and J. W. Kauffman—123
Size effect in electrical resistivity of alloys, Ben A. Green, Jr.—1402
Topology of Fermi surface of Ga, W. A. Reed and J. A. Marcus—1298

Electrical Discharges
Volume recombination, constriction, and volt-ampere characteristics of positive column, Carl Kenty—1235

Electrical Properties (see also **Dielectrics and Dielectric Properties; Electrical Conductivity and Resistance; Semiconductors; Superconductors**)
Electrode effects on Al_2O_3 tunnel junctions, Robert M. Handy—1968
Field dependence of electric susceptibility of ionic crystals, F. Ninio—962
Nuclear spin-lattice relaxation in some ferroelectric ammonium salts, S. R. Miller, R. Blinc, M. Brenman, and J. S. Waugh—528
Random motion of deuterons in KD_2PO_4, V. Hugo Schmidt and Edwin A. Uehling—447
Space-charge-limited currents in iodine single crystals, A. Many, S. Z. Weisz, and M. Simhony—1989
Theory of transient space-charge-limited currents in solids in presence of trapping, A. Many and G. Rakavy—1980
Theory of tunneling and its dependence on longitudinal magnetic field, Petros N. Argyres—1386

Electrodynamics (see **Electromagnetic Theory and Electrodynamics**)

Electroluminescence (see **Luminescence**)

Electrolysis (see **Chemical Effects and Properties**)

Electromagnetic Theory and Electrodynamics (see also **Microwaves**)
Effective-field approach to problem of interacting polarized particles, K. Compaan and H. Zijlstra—1722
Structure-independent electrodynamics in electric dipole approximation, Ralph Schiller and Melvin Schwartz—1582

Electron Diffraction (see **Diffraction; Scattering of Electrons and Positrons**)

Electron Optics (see **Electromagnetic Theory and Electrodynamics**)

Electronic Tubes (see **Methods and Instruments**)

Electrons and Positrons (see also **Electromagnetic Theory and Electrodynamics; Elementary Particle Interactions; Scattering of Electrons and Positrons**)
Annihilation of positrons from H^-e^+ ground state, S. M. Neamtan, G. Darewych, and G. Oczkowski—193
Enhancement of electron density around positive point charges in metals and lifetimes of positrons, N. H. March and A. M. Murray—1480
Measurement of photon polarization by pair production, L. C. Maximon and Haakon Olsen—310

Electrons, Mobility (see **Ions and Electrons, Mobility**)

Electrons, Scattering of (see **Scattering of Electrons and Positrons**)

Electrons, Secondary (see **Electrical Properties**)

Electrons, Thermionic (see **Electrical Properties**)

Electro-Optical Effects (see **Optical Properties**)

Electrostriction (see **Dielectrics and Dielectric Properties**)

Elementary Particle Interactions, General
Coordinate covariance and particle spectrum, D. W. Joseph—319
Experiment test of conservation of nucleons, C. C. Giamati and F. Reines—2178
General formalism obeying intrinsic exclusion principle, Wojciech Królikowski—1195
K^* and K meson pole contributions to leptonic Λ decay, Richard E. Norton—1216
Lorentz invariance and kinematic structure of vertex functions, Loyal Durand, III, Paul C. DeCelles, and Robert B. Marr—1882
Model of pionic hyperon decay, Jugoro Iizuka and Reinhard Oehme—787
Mott scattering of polarized muons, Marcel Bardon, Paolo Franzini, and Juliet Lee—1826
Resonance-interference method for determining $K\Sigma N$ parity, Richard H. Capps—1574
Σ^0 lifetime and associated photoproduction poles, Richard H. Capps—324
Singularities in partial-wave amplitudes for two ingoing and two outgoing particles, J. Kennedy and T. D. Spearman—1596
Studies of optics of neutrons. I. Measurement of neutron-proton coherent scattering amplitude by mirror reflection, W. C. Dickinson, L. Passell, and O. Halpern—632
Virtual particles, Asim O. Barut—1873
Woolly cusps, M. Nauenberg and A. Pais—360

Elementary Particle Interactions, Electromagnetic
Bremsstrahlung accompanying high-energy π meson-proton collisions, H. Überall—861
Electromagnetic production of charged vector mesons, Sidney A. Bludman and James A. Young—303
Electron-proton scattering at low momentum transfers, P. Lehmann, R. Taylor, and Richard Wilson—1183
Electrostatic corrections to nucleon-nucleon dispersion relations, David Y. Wong and H. Pierre Noyes—1866
Fixed-angle dispersion relations for nucleon Compton scattering. I, A. C. Hearn and E. Leader—789
High-energy behavior of nucleon-electromagnetic form factors, R. G. Sachs—2256
Parity of neutral pion and decay $\pi^0 \to 2e^+ + 2e^-$, N. P. Samios, R. Plano, A. Prodell, M. Schwartz, and J. Steinberger—1844
Production of pion pairs by photon in Coulomb field of nucleus, Yongduk Kim—345

Elementary Particle Interactions, Strong
Analysis of multichannel reactions, Gordon L. Shaw and Marc H. Ross—806
Behavior of scattering amplitudes at high energies, bound states, and resonances, R. Blankenbecler and M. L. Goldberger—766
Effective range analysis of s-wave K^-p reactions, Gordon L. Shaw and Marc H. Ross—814
Electrostatic corrections to nucleon-nucleon dispersion relations, David Y. Wong and H. Pierre Noyes—1866
Evidence concerning pion-pion interactions below 765-MeV pion-pion resonance, C. Clyde Peck, Lawrence W. Jones, and Martin L. Perl—1836
Experimental consequences of hypothesis of Regge poles, S. C. Frautschi, M. Gell-Mann, and F. Zachariasen—2204
$I=2$ s-wave π-π scattering length, Janos Kirz, Joseph Schwartz, and Robert D. Tripp—763
Multiple meson production in proton-proton collisions at 2.85 BeV, E. L. Hart, R. J. Louttit, D. Luers, T. W. Morris, W. J. Willis, and S. S. Yamamoto—747
N/D method, M. Sugawara and A. Kanazawa—2251
Note on nucleon-nucleon potential, K. E. Lassila, M. H. Hull, Jr., H. M. Ruppel, F. A. McDonald, and G. Breit—881

Nucleon-nucleon triplet-even potentials, Norman K. Glendenning and Gustav Kramer—2159
Perturbation theory of pion-pion interaction. II. Two-pion approximation, Tai Tsun Wu—2219
π^-+p interaction at 1.3 BeV, W. D. Shephard and W. D. Walker—278
$\pi^-+p \rightarrow \pi^0+n$ charge exchange cross sections at 20.7 and 31.0 MeV, K. Miyake, K. F. Kinsey, and D. E. Knapp—2188
Pion-nucleon processes above first maximum according to strong-coupling method, Helmut Jahn—824
Pion-pion interaction in reaction $\bar{p}+p \rightarrow 2\pi^+ + 2\pi^- + n\pi^0$, Janice Button, George R. Kalbfleisch, Gerald R. Lynch, Bogdan C. Maglić, Arthur H. Rosenfeld, and M. Lynn Stevenson—1858
Polarization in π^--p scattering between 500 and 940 MeV, E. F. Beall, B. Cork, P. G. Murphy, W. A. Wenzel, C. M. P. Johnson, and L. J. Koester, Jr.—1554
Polarization of recoil proton from neutral photoproduction at 800 and 910 MeV, C. Mencuccini, R. Querzoli, and G. Salvini—1181
Production of pion pairs by photon in Coulomb field of nucleus, Yongduk Kim—345
Proof of partial-wave dispersion relations in perturbation theory, Noboru Nakanishi—1225
Regge poles and resonances in strong interaction, David Y. Wong—1220
Regge poles in π-π scattering, Geoffrey F. Chew, Steven C. Frautschi, and Stanley Mandelstam—1202
Single neutral pion production by pions at 1100 MeV, V. P. Kenney, W. D. Shephard, and C. D. Gall—736
Singularities in partial-wave amplitudes for two ingoing and two outgoing particles, J. Kennedy and T. D. Spearman—1596
Studies of optics of neutrons. I. Measurement of neutron-proton coherent scattering amplitude by mirror reflection, W. C. Dickinson, L. Passell, and O. Halpern—632
Theory of P-wave π-Λ resonance, Saul Barshay—1232
Unitarity condition and anomalous vertex functions, K. Nishijima—852
Virtual particles, Asim O. Barut—1873
Woolly cusps, M. Nauenberg and A. Pais—360

Elementary Particle Interactions, Weak
Conserved current hypothesis and β decay of RaE, Jun-Ichi Fujita—202
Experiment test of conservation of nucleons, C. C. Giamati and F. Reines—2178
High-energy neutrino reactions without production of intermediate bosons, T. D. Lee and C. N. Yang—2239
Induced pseudoscalar interaction and low-energy anomalies in β spectra, J. M. Pearson—1100
K^* and K meson pole contributions to leptonic Λ decay, Richard E. Norton—1216
Model of pionic hyperon decay. Jugoro Iizuka and Reinhard Oehme—787
μ capture with six nucleon form factors, J. Barclay Adams—1567
Neutrino-induced reaction in C^{12}, H. Überall—876
Nuclear reactions induced by neutrinos of intermediate energy, H. Überall—1572
Possible neutrinoless decay modes of muon, J. Dreitlein and H. Primakoff—375
Self-consistent model for nonleptonic decays of Σ and Λ hyperons, Virendra Singh and Bhalchandra M. Udgaonkar—2248

Elements (see **Atomic Mass and Abundance**)
Energy Loss of Particles (see **Range and Energy Loss**)
Energy States of Atoms (see **Atomic Structure and Spectra**)
Energy States of Molecules (see **Molecular Structure and Spectra**)
Energy States of Nucleus (see **Nuclear Reactions; Nuclear Spectra; Nuclear Structure Theory**)
Equations of State (see **Chemical Effects and Properties**)
Errata
Cyclotron resonance in Al, T. W. Moore and F. W. Spong—2261(E)
Ferrimagnetic resonance in rare-earth doped YIG. II. Tb substitution, J. F. Dillon, Jr., and L. R. Walker—2261(E)
Landau damping to all orders, David Montgomery and David Gorman—2261(E)
Momentum distributions for protons in Li^6 in cluster model, J. Strnad—2262(E)
Neutron coherent scattering amplitudes for Cd and Eu, G. Arnold and N. Nereson—2262(E)
Relativistic Lee model, Marian Günther—2261(E)
$3d$ band structure of Cr, M. Asdente and J. Friedel—2262(E)
Errors of Measurement (see **Methods and Instruments**)
Evaporation (see **Liquids**)
Excitation of Atoms (see **Atomic Structure and Spectra**)
Excitation of Molecules (see **Molecular Structure and Spectra**)
Excitation of Nucleus (see **Nuclear Reactions; Nuclear Spectra; Nuclear Structure Theory**)
Explosion Phenomena (see **Fluid Dynamics**)

Faraday Effect (see **Optical Properties**)
Ferroelectric Phenomena (see **Dielectrics and Dielectric Properties**)
Ferromagnetism (see **Magnetic Properties**)
Field Emission (see **Electrical Properties**)
Field Theory (see also **Quantum Electrodynamics**)
Behavior of scattering amplitudes at high energies, bound states, and resonances, R. Blankenbecler and M. L. Goldberger—766
Connection between gauge invariance and mass, David G. Boulware and Walter Gilbert—1563
Conserved current hypothesis and β decay of RaE, Jun-Ichi Fujita—202
Coordinate covariance and particle spectrum, D. W. Joseph—319
Electrostatic corrections to nucleon-nucleon dispersion relations, David Y. Wong and H. Pierre Noyes—1866
Experimental consequences of hypothesis of Regge poles, S. C. Frautschi, M. Gell-Mann, and F. Zachariasen—2204
General formalism obeying intrinsic exclusion principle, Wojciech Królikowski—1195
Lagrangian formulation of Zachariasen model, W. Thirring—1209
Lee-Yang vector field and isotropy of universe, R. H. Dicke—1580
Lorentz invariance and kinematic structure of vertex functions, Loyal Durand, III, Paul C. DeCelles, and Robert B. Marr—1882
N/D method, M. Sugawara and A. Kanazawa—2251
Proof of partial-wave dispersion relations in perturbation theory, Noboru Nakanishi—1225
Regge poles and resonances in strong interaction, David Y. Wong—1220
Relativistic Lee model, Marian Günther—2261(E)
Singularities in partial-wave amplitudes for two ingoing and two outgoing particles, J. Kennedy and T. D. Spearman—1596
Unitarity condition and anomalous vertex functions, K. Nishijima—852
Woolly cusps, M. Nauenberg and A. Pais—360

Films, Properties
Electrode effects on Al_2O_3 tunnel junctions, Robert M. Handy—1968
Magnetoresistance and domain structure in thin Ni films, Richard L. Coren and Hellmut J. Juretschke—1378

Films, Properties (Continued)
Tunneling into superconductors at temperatures below 1°K, I. Giaever, H. R. Hart, Jr., and K. Megerle—941
Fine Structure (see **Atomic Structure and Spectra**)
Fission of Nucleus (see **Nuclear Fission**)
Fluctuation Phenomena (see **Noise**)
Fluid Dynamics
Eikonal method in magnetohydrodynamics, Steven Weinberg—1899
Fluorescence (see **Luminescence**)

Galvanomagnetic Effect (see **Magnetic Properties**)
Gamma Rays (see also **Nuclear Reactions; Nuclear Spectra; Radiation; Range and Energy Loss**)
Elastic scattering of 11.5-17.7-MeV photons by Au measured with a bremsstrahlung monochromator, J. S. O'Connell, P. Tipler, and P. Axel—228
Electromagnetic radiation from nuclear explosion in space, W. J. Karzas and R. Latter—1919
Elliptical polarization of Fe^{57} γ rays, H. Frauenfelder, D. E. Nagle, R. D. Taylor, D. R. F. Cochran, and W. M. Visscher—1065
Fixed angle dispersion relations for nucleon Compton scattering. I, A. C. Hearn and E. Leader—789
Influence of resonant absorber whose thickness varies linearly with time on special shape of incident Lorentzian wave packet, I. Nowik—1878
Measurement of photon polarization by pair production, L. C. Maximon and Haakon Olsen—310
Gases
Diffusion of slow electrons in gases, L. W. Cochran and D. W. Forester—1785
Electron energy distribution in slightly ionized air under influence of electric and magnetic fields, Nathaniel P. Carleton and Lawrence R. Megill—2089
Geophysics
Electromagnetic radiation from nuclear explosion in space, W. J. Karzas and R. Latter—1919
Glasses (see **Molecular Aggregates**)
Gravitation (see **Relativity and Gravitation**)
Gyromagnetization (see **Magnetic Properties**)

Hall Effect (see **Electrical Conductivity and Resistance; Semiconductors**)
Heat Capacity (see **Thermal Properties**)
Heat Conduction (see **Thermal Properties**)
Heat of Dissociation and Formation (see **Molecular Structure and Spectra**)
Heat of Fusion (see **Thermal Properties**)
Heat of Vaporization (see **Thermal Properties**)
Helium, Liquid
Lifetime effects in condensed He^3, Pierre Morel and Philippe Nozières—1909
Mobility of ions in liquid He^4I and He^3 as a function of pressure and temperature, L. Meyer, H. T. David, Stuart A. Rice, and R. J. Donnelly—1927
Hydrodynamics (see **Fluid Dynamics**)
Hyperfine Structure (see **Atomic Structure and Spectra; Molecular Structure and Spectra; Nuclear Moments and Spin**)
Hyperons (see **Mesons and Hyperons**)

Imperfections in Solids (see also **Crystalline State; Electrical Conductivity and Resistance; Luminescence; Semiconductors**)
Dynamics of cubic crystals with local change of mass, G. F. Nardelli and N. Tettamanzi—1283
Electron-nuclear double resonance spectrum of *F*-center electron in alkali halides (with NaCl structure), T. E. Feuchtwang—1628
Electron-nuclear double resonance studies of color centers, William T. Doyle—1421
Energy dependence of electron damage in Cu, A. Sosin—1698
γ irradiation effects on electrets, Bernhard Gross and R. J. de Moraes—930
Hyperfine interaction constants of *F*-center electron with lattice in alkali halides (with NaCl structure), T. E. Feuchtwang—1616
Infrared sensitivity of ZnS:Cu:Co phosphor, B. Goldstein and J. J. Dropkin—966
Interaction of antiferromagnetic spin waves with Bloch wall, David I. Paul—78
Lattice thermal conductivity at low temperatures, Bal Krishna Agrawal and G. S. Verma—24
Linde's law and scattering power of associated point defects, C. P. Flynn—533
Low-temperature paramagnetic relaxation of color centers in KCl, W. D. Ohlsen and D. F. Holcomb—1953
Photoequilibrium between KCl *F* and *F'* centers at 80°K, A. Costikas and L. I. Grossweiner—1410
Precipitation of Te and Pb in PbTe crystals, W. W. Scanlon—509
Quenching studies of Au-Ag alloy, R. Kloske and J. W. Kauffman—123
Radiation-induced recombination and trapping centers in Ge. II. Annealing in γ-irradiated, Sb- and As-doped material, O. L. Curtis, Jr., and J. H. Crawford, Jr.—1342
Size effect in electrical resistivity of alloys, Ben A. Green, Jr.—1402
Space-charge-limited currents in iodine single crystals, A. Many, S. Z. Weisz, and M. Simhony—1989
Structure sensitivity of *F*-center generation by x rays at low temperatures, Charles L. Bauer and Robert B. Gordon—73
Theory of defect formation in alkali halides by ionizing radiation, Ferd E. Williams—70
Theory of diffusion and equilibrium position of interstitial impurities in diamond lattices, K. Weiser—1427
Theory of transient space-charge-limited currents in solids in presence of trapping, A. Many and G. Rakavy—1980
Inelastic Scattering (see **Nuclear Reactions; Scattering**)
Instruments (see **Methods and Instruments**)
Internal Conversion (see **Nuclear Spectra**)
Ionization (see also **Electrical Discharges; Range and Energy Loss**)
Ionization Potentials of Atoms (see **Atomic Structure and Spectra**)
Ionization Potentials of Molecules (see **Molecular Structure and Spectra**)
Ionosphere (see **Geophysics**)
Ions (see also **Electrical Discharges**)
Electron photodetachment from ions and elastic collision cross sections for O, C, Cl, and F, John W. Cooper and Jerry B. Martin—1482
Energy loss of fast ion in plasma, S. T. Butler and M. J. Buckingham—1
$1\,^1S$, $2\,^1S$, and $2\,^3S$ states of H^- and of He, C. L. Pekeris—1470
Sputtering experiments in Rutherford collision region, Manfred Kaminsky—1267
Theory of quadrupole polarizability and antishielding of nuclear quadrupole moments of many-electron ions, P. G. Khubchandani, R. R. Sharma, and T. P. Das—594
Ions and Electrons, Mobility (see also **Semiconductors**)
Diffusion of slow electrons in gases, L. W. Cochran and D. W. Forester—1785
Electron energy distribution in slightly ionized air under influence of electric and magnetic fields, Nathaniel P. Carleton and Lawrence R. Megill—2089

Ionic conductivity of doped NaCl crystals, R. W. Dreyfus and A. S. Nowick—1367
Mobility of ions in liquid He^4I and He^3 as a function of pressure and temperature, L. Meyer, H. T. Davis, Stuart A. Rice, and R. J. Donnelly—1927
Space-charge-limited currents in iodine single crystals, A. Many, S. Z. Weisz, and M. Simhony—1989
Theory of transient space-charge-limited currents in solids in presence of trapping, A. Many and G. Rakavy—1980
Isobars (see **Atomic Mass and Abundance**)
Isomers, Molecular (see **Molecular Structure and Spectra**)
Isomers, Nuclear (see **Nuclear Spectra**)
Isotopes (see **Atomic Mass and Abundance; Radioactivity**)

Kerr Effect (see **Optical Properties**)
Kinetic Theory of Gases (see **Gases**)

Liquid Helium (see **Helium, Liquid**)
Liquids
Nuclear magnetic relaxation of three-spin asymmetric molecule in liquid, G. W. Kattawar and M. Eisner—1054
Scattering of slow neutrons by solid and liquid terphenyls, Robert M. Brugger—29
Stochastic model of liquid and cold neutron scattering. II, A. Rahman, K. S. Singwi, and A. Sjölander—997
Theory of slow neutron scattering by liquids. I, A. Rahman, K. S. Singwi, and A. Sjölander—986
Luminescence
Absorption and fluorescence of Sm^{2+} in CaF_2, SrF_2, and BaF_2, D. L. Wood and W. Kaiser—2079
Infrared sensitivity of ZnS:Cu:Co phosphor, B. Goldstein and J. J. Dropkin—966
Measurement of magnetic moment of 279-keV state in Tl^{203} using resonance fluorescence, B. I. Deutch—1168
Sharp line fluorescence, electron paramagnetic resonance, and thermoluminescence of Mn^{4+} in α-Al_2O_3, S. Geschwind, P. Kisliuk, M. P. Klein, J. P. Remeika, and D. L. Wood—1684
Spectroscopy and luminescence properties of CdF_2:Eu, J. D. Kingsley and J. S. Prener—458

Magnetic Fields (see **Electromagnetic Theory and Electrodynamics**)
Magnetic Properties
Anisotropic superexchange in βMnS, J. J. Pearson—901
Band structure and Fermi surface of Zn, Walter A. Harrison—497
Bloch electrons in magnetic field, E. I. Blount—1636
Certain general order-disorder models in limit of long-range interactions, George A. Baker, Jr.—2071
Classical theory of ground spin-state in cubic spinels, D. H. Lyons, T. A. Kaplan, K. Dwight, and N. Menyuk—540
Critical concentrations in magnetism, S. H. Charap—1393
Effective-field approach to problem of interacting polarized particles, K. Compaan and H. Zijlstra—1722
Exchange interaction and Heisenberg's spin Hamiltonian, Tadashi Arai—471
Ferrimagnetic resonance in rare-earth doped YIG. II. Tb substitution, J. F. Dillon, Jr., and L. R. Walker—2261(E)
Ferrimagnetic structure of magnetite crystal as revealed by electron diffraction, S. Yamaguchi—102
Ferro- and antiferromagnetism in cubic cluster of spins, G. Dresselhaus—1664
Ferromagnetism in EuH_2, R. L. Zanowick and W. E. Wallace—537
Interaction of antiferromagnetic spin waves with Bloch wall, David I. Paul—78
Long-range order of linear antiferromagnetic chain, N. Karayianis, C. A. Morrison, and D. E. Wortman—1443
Low-field de Haas-van Alphen effect in Zn, A. S. Joseph and W. L. Gordon—489
Low-temperature magnetic properties of dilute Mg-Mn, Al-Mn, Mg-Fe, and Al-Fe alloys, E. W. Collings and F. T. Hedgcock—1654
Magnetic disorder as first-order phase transformation, C. P. Bean and D. S. Rodbell—104
Magnetic field dependence of surface impedance of superconducting Sn at 3 kMc/sec, P. L. Richards—912
Magnetic structure of $MnCr_2O_4$, J. M. Hastings and L. M. Corliss—556
Magnetic structures of Tm, W. C. Koehler, J. W. Cable, E. O. Wollan, and M. K. Wilkinson—1672
Magnetic susceptibility of H_2 molecule, J. P. Auffray—146
Magnetoresistance and domain structure in thin Ni films, Richard L. Coren and Hellmut J. Juretschke—1378
Maximum variational principle for conduction problems in magnetic field, and theory of magnon drag, M. Bailyn—2040
Moriya interaction and problem of spin arrangements in βMnS, Frederic Keffer—896
Mössbauer study of hyperfine fields and isomer shifts in Fe_4N and $(Fe,Ni)_4N$, G. Shirane, W. J. Takei, and S. L. Ruby—49
Nuclear magnetic relaxation in ionic crystals at high temperatures, P. P. Mahendroo and A. W. Nolle—125
Paramagnetic resonance of *S*-state ions in metals, M. Peter, D. Shaltiel, J. H. Wernick, H. J. Williams, J. B. Mock, and R. C. Sherwood—1395
Photomagnetothermal effect in semiconductors, W. W. Gärtner, C. Loscoe, and H. Mette—1680
Role of *e-e* collisions in galvanomagnetic effects, B. V. Paranjape and Benjamin U. Stewart—1668
Saturation effects in moderately diluted cesium chromium alum, P. B. Kissinger and R. T. Weidner—506
Some remarks on correlations in classical order-disorder phenomena, Frank H. Stillinger, Jr.—1239
Spin-lattice relaxation time of Sm ethyl sulfate, R. Orbach—1349
Theory of exchange resonance in antiferromagnetic $CuCl_2 \cdot 2H_2O$, R. J. Joenk—565
3*d* band structure of Cr, M. Asdente and J. Friedel—2262(E)
Magnetic Resonance (see also **Nuclear Moments and Spin**)
Cyclotron resonance in Al, T. W. Moore and F. W. Spong—2261(E)
Double quantum transition in electron spin resonance of γ-irradiated acetyl-*d*, *l*-alanine, Mikio Katayama—1440
Electron-nuclear double resonance spectrum of *F*-center electron in alkali halides (with NaCl structure), T. E. Feuchtwang—1628
Electron-nuclear double resonance studies of color centers, William T. Doyle—1421
Electron spin resonance in antimony, W. R. Datars—975
Electron spin resonance of alkali atoms in inert-gas matrices, C. K. Jen, V. A. Bowers, E. L. Cochran, and S. N. Foner—1749
Ferrimagnetic resonance in rare-earth doped YIG. II. Tb substitution, J. F. Dillon, Jr., and L. R. Walker—2261(E)
Hfs and nuclear moments of Lu^{175}, George J. Ritter—240
Hfs of ^2P states of Zn^{67} and Mg^{25}, Allen Lurio—1768
Hfs of Pr^{143}, Amado Y. Cabezas, Ingvar P. K. Lindgren, Richard Marrus, and William A. Nierenberg—1004
Hole burning effects in He-Ne optical maser, W. R. Bennet, Jr.—580
Low-temperature paramagnetic relaxation of color centers in KCl, W. D. Ohlsen and D. F. Holcomb—1953
Metastable H_2 molecules. II. Fine structure of parahydrogen, William Lichten—1020
Microwave Zeeman effect of free hydroxyl radicals: $^2\Pi_1$ levels, H. E. Radford—1035
Nuclear magnetic relaxation of three-spin asymmetric molecule in liquid, G. W. Kattawar and M. Eisner—1054

Magnetic Resonance (Continued)
Nuclear magnetic resonance of Lu^{175}, A. H. Reddoch and G. J. Ritter—1493
Nuclear magnetic resonance of Tc^{99} in Tc metal and Tc^{99} and V^{51} in Tc-V alloys, D. O. Van Ostenburg, H. Trapp, and D. J. Lam—938
Nuclear moment of Ni^{61}, Lawrence H. Bennett and Ralph L. Streever, Jr.—2141
Nuclear spin, hfs, and nuclear moments of 6.8-day Lu^{177}, F. Russell Petersen and Howard A. Shugart—252
Nuclear spin-lattice relaxation in some ferroelectric ammonium salts, S. R. Miller, R. Blinc, M. Brenman, and J. S. Waugh—528
Nuclear spin-lattice relaxation in superconducting Al alloys, Yoshika Masuda—1271
Optical detection of level crossing in $(5s5p)\ ^3P_1$ state of Cd^{111} and Cd^{113}, P. Thaddeus and R. Novick—1774
Paramagnetic resonance of *S*-state ions in metals, M. Peter, D. Shaltiel, J. H. Wernick, H. J. Williams, J. B. Mock, and R. C. Sherwood—1395
Paramagnetic resonance of Tb^{3+} ions in $CaWO_4$ and CaF_2, P. A. Forrester and C. F. Hempstead—923
Paramagnetic resonance of trivalent Fe^{57} in ZnO, W. M. Walsh, Jr., and L. W. Rupp—952
Quantum mechanical effects in stimulated optical emission, Roscoe C. Williams—1011
Random motion of deuterons in KD_2PO_4, V. Hugo Schmidt and Edwin A. Uehling—447
Saturation effects in moderately diluted cesium chromium alum, P. B. Kissinger and R. T. Weidner—506
Second-order hyperfine and Zeeman corrections for (sl) configuration, A. Lurio, M. Mandel, and R. Novick—1758
Sharp-line fluorescence, electron paramagnetic resonance, and thermoluminescence of Mn^{4+} in α-Al_2O_3, S. Geschwind, P. Kisliuk, M. P. Klein, J. P. Remeika, and D. L. Wood—1684
Sign of Li^8 magnetic moment, Donald Connor and Tung Tsang—1506
Spin resonance of Pd and Pt in Si, H. H. Woodbury and G. W. Ludwig—466
Theory of exchange relaxation of hfs in electron spin resonance, James D. Currin—1995
Theory of exchange resonance in antiferromagnetic $CuCl_2 \cdot 2H_2O$, R. J. Joenk—565
Theory of hydrogen maser, Daniel Kleppner, H. Mark Goldenberg, and Norman F. Ramsey—603
Magnetohydrodynamics (see **Fluid Dynamics**)
Magneto-Optical Effects (see **Optical Properties**)
Magnetoresistance (see **Electrical Conductivity and Resistance; Semiconductors**)
Magnetostriction (see **Magnetic Properties**)
Masers (see **Magnetic Resonance**)
Mass Defects (see **Atomic Mass and Abundance**)
Mass Spectroscopy (see **Atomic Mass and Abundance; Methods and Instruments**)
Mathematical Methods
Functional derivative techniques in theory of superconductivity, Stanley Engelsberg—1251
New class of classical uncertainty relations giving uncertainty for long and certainty for short times, Eugene Guth—1213
Measurements (see **Methods and Instruments**)
Mechanics
Quantization and classical Hamilton-Jacobi equation, Lloyd Motz—378
Mechanics, Quantum—Atomic Structure and Spectra (see **Atomic Structure and Spectra**)
Mechanics, Quantum—General (see **Quantum Mechanics**)
Mechanics, Quantum—Molecular Structure and Spectra (see **Molecular Structure and Spectra**)
Mechanics, Quantum—Nuclear (see **Nuclear Structure Theory**)
Mechanics, Quantum—of Solid Bodies (see **Crystalline State**)
Mechanics, Statistical (see **Statistical Mechanics and Thermodynamics**)
Meson Field Theory (see **Field Theory**)
Mesons and Hyperons (see also **Cosmic Radiation; Elementary Particle Interactions; Nuclear Reactions Induced by Mesons and Hyperons; Scattering of Mesons and Hyperons**)
Electromagnetic production of charged vector mesons, Sidney A. Bludman and James A. Young—303
K^* and K meson pole contributions to leptonic Λ decay, Richard E. Norton—1216
Model of pionic hyperon decay, Jugoro Iizuka and Reinhard Oehme—787
Mott scattering of polarized muons, Marcel Bardon, Paolo Franzini, and Juliet Lee—1826
Multiple meson production in proton-proton collisions at 2.85 BeV, E. L. Hart, R. J. Louttit, D. Luers, T. W. Morris, W. J. Willis, and S. S. Yamamoto—747
Parity of neutral pion and decay $\pi^0 \rightarrow 2e^+ + 2e^-$, N. P. Samios, R. Plano, A. Prodell, M. Schwartz, and J. Steinberger—1844
Pion-pion interaction in reaction $\bar{p}+p \rightarrow 2\pi^+ + 2\pi^- + n\pi^0$, Janice Button, George R. Kalbfleisch, Gerald R. Lynch, Bogdan C. Maglić, Arthur H. Rosenfeld, and M. Lynn Stevenson—1858
Possible neutrinoless decay modes of muon, J. Dreitlein and H. Primakoff—375
Production of pion pairs by photon in Coulomb field of nucleus, Yongduk Kim—345
Resonance-interference method for determining $K\Sigma N$ parity, Richard H. Capps—1574
Self-consistent model for nonleptonic decays of Σ and Λ hyperons, Virendra Singh and Bhalchandra M. Udgaonkar—2248
Σ^0 lifetime and associated photoproduction poles, Richard H. Capps—324
Single neutral pion production by pions at 1100 MeV, V. P. Kenney, W. D. Shephard, and C. D. Gall—736
Metals (see **Crystalline State**)
Metastable Atoms (see **Atomic Structure and Spectra**)
Metastable Molecules (see **Molecular Structure and Spectra**)
Meteorology (see **Geophysics**)
Methods and Instruments
Hole burning effects in He-Ne optical maser, W. R. Bennett, Jr.—580
Microwaves (see also **Atomic Structure and Spectra; Magnetic Resonance; Molecular Structure and Spectra; Nuclear Moments and Spin**)
Microwave Zeeman effect of free hydroxyl radicals: $^2\Pi_1$ levels, H. E. Radford—1035
Theory of hydrogen maser, Daniel Kleppner, H. Mark Goldenberg, and Norman F. Ramsey—603
Miscellaneous
Mobility of Ions and Electrons (see **Ions and Electrons, Mobility**)
Molecular Aggregates
Molecular Beams (see **Atomic and Molecular Beams**)
Molecular Structure and Spectra
Double quantum transition in electron spin resonance of γ-irradiated acetyl-*d*, *l*-alanine, Mikio Katayama—1440
Magnetic susceptibility of H_2 molecule, J. P. Auffray—146
Metastable H_2 molecules. II. Fine structure of parahydrogen, William Lichten—1020
Microwave Zeeman effect of free hydroxyl radicals: $^2\Pi_1$ levels, H. E. Radford—1035
Moments, Nuclear (see **Nuclear Moments and Spin**)
Moments of Molecules (see **Molecular Structure and Spectra**)
Muonium (see **Atomic Structure and Spectra; Mesons and Hyperons**)

Neutrinos and Antineutrinos (see also **Elementary Particle Interactions; Nuclear Spectra; Radioactivity**)
High-energy neutrino reactions without production of intermediate bosons, T. D. Lee and C. N. Yang—2239
Neutrino-induced reaction in C^{12}, H. Überall—876
Nuclear reactions induced by neutrinos of intermediate energy, H. Überall—1572
Possible neutrinoless decay modes of muon, J. Dreitlein and H. Primakoff—375
Neutron Diffraction (see **Diffraction; Scattering of Neutrons**)
Neutrons (see **Elementary Particle Interactions**)
Noise
Nuclear Fission
Delayed neutron yields in photofission of U^{238} and Th^{232}, G. Moscati and J. Goldemberg—1098
Dependence of neutron production in fission on rate of change of nuclear potential, Robert W. Fuller—684
Electromagnetic radiation from nuclear explosion in space, W. J. Karzas and R. Latter—1919
Energy dependence of prompt $\bar{\nu}$ for neutron-induced fission of U^{235}, J. W. Meadows and J. F. Whalen—197
Fission fragment angular distributions and saddle deformations, R. Chaudhry, R. Vandenbosch, and J. R. Huizenga —220
Fission of Ag and Br in nuclear emulsion by 1.0–30-BeV protons, E. W. Baker and S. Katcoff—729
14.5-MeV neutron-induced fission of U^{238}, K. M. Broom—627
He-ion-induced fission of Bi, Pb, Tl, and Au, J. R. Huizenga, R. Chaudhry, and R. Vandenbosch—210
Investigation of light fragmentation products and peculiarities of nuclear fission at high energies of incident particles, P. A. Goritchev, V. F. Darovskikh, O. V. Lozhkin, A. I. Obukhov, N. A. Perfilov, and U. P. Jakovlev—2196
Long-range particles from nuclear fission, Ralph A. Nobles—1508
Mike results—implications for spontaneous fission, David W. Dorn—693
Nuclear-charge distribution in low-energy fission, Arthur Wahl, Robert L. Ferguson, David R. Nethaway, David E. Troutner, and Kurt Wolfsberg—1117
Spallation-fission competition in astatine compound nuclei formed by heavy-ion bombardment, T. Darrah Thomas, Glen E. Gordon, Robert M. Latimer, and Glenn T. Seaborg—1805
Spontaneous fission half-life of Pu^{240}, D. E. Watt, F. J. Bannister, J. B. Laidler, and F. Brown—264
Velocity and angular distributions of prompt neutrons from spontaneous fission of Cf^{252}, Harry R. Bowman, Stanley G. Thompson, J. C. D. Milton, and Wladyslaw J. Swiatecki—2120
Nuclear Forces (see **Elementary Particle Interactions; Field Theory; Nuclear Structure Theory**)
Nuclear Induction (see **Magnetic Resonance; Nuclear Moments and Spin**)
Nuclear Isomers (see **Nuclear Spectra; Radioactivity**)
Nuclear Moments and Spin (see also **Nuclear Spectra**)
Electric quadrupole moment of 14.4-keV state of Fe^{57}, C. E. Johnson, W. Marshall, and G. J. Perlow—1503
Hfs and nuclear moments of Lu^{175}, George J. Ritter—240
Hfs of Pr^{142}, Amado Y. Cabezas, Ingvar P. K. Lindgren, Richard Marrus, and William A. Nierenberg—1004
Measurement of magnetic moment of 279-keV state in Tl^{203} using resonance fluorescence, B. I. Deutch—1168
Nuclear magnetic resonance of Lu^{175}, A. H. Reddoch and G. J. Ritter—1493
Nuclear magnetic resonance of Tc^{99} in Tc metal and Tc^{99} and V^{51} in Tc-V alloys, D. O. Van Ostenburg, H. Trapp, and D. J. Lam—938
Nuclear moment of Ni^{61}, Lawrence H. Bennett and Ralph L. Streever, Jr.—2141
Nuclear spin, hfs, and nuclear moments of 6.8-day Lu^{177}, F. Russell Petersen and Howard A. Shugart—252
Sign of Li^8 magnetic moment, Donald Connor and Tung Tsang—1506
Theory of quadrupole polarizability and antishielding of nuclear quadrupole moments of many-electron ions, P. G. Khubchandani, R. R. Sharma, and T. P. Das—594
Nuclear Photoeffects
Delayed neutron yields in photofission of U^{238} and Th^{232}, G. Moscati and J. Goldemberg—1098
Electric dipole ground-state transition width strength function and 7-MeV photon interactions, Peter Axel—671
Photonuclear activation by 20.5-MeV γ rays, W. E. Del Bianco and W. E. Stephens—709
Photoproton reaction in Be^9, F. M. Clikeman, A. J. Bureau, and M. G. Stewart—1822
Polarization of recoil proton from neutral photoproduction at 800 and 910 MeV, C. Mencuccini, R. Querzoli, and G. Salvini—1181
Production of pion pairs by photon in Coulomb field of nucleus, Yongduk Kim—345
Σ^0 lifetime and associated photoproduction poles, Richard H. Capps—324
Nuclear Reactions, General (see also **Elementary Particle Interactions; Scattering**)
Analysis of multichannel reactions, Gordon L. Shaw and Marc H. Ross—806
Angular distribution and ranges of N^{13} particles resulting from 27.5-MeV N^{14} ions on Mg^{24}, K. S. Toth—1489
Differential cross sections for reactions $C^{12}(Li^6,\alpha)N^{14}$ and $C^{12}(Li^7,\alpha)N^{15}$, Russell K. Hobbie and Fred F. Forbes—2137
Formal theory of rearrangement collisions. II, M. H. Mittleman—373
γ rays resulting from Li bombardments of Li, Edward H. Berkowitz—2168
Heavy-particle stripping and structure of N^{14}, D. R. Inglis —1789
High-energy neutrino reactions without production of intermediate bosons, T. D. Lee and C. N. Yang—2239
Neutrino-induced reaction in C^{12}, H. Überall—876
Nuclear reactions induced by neutrinos of intermediate energy, H. Überall—1572
Scattering of O ions from Ar and Xe, J. G. Kelley, F. E. Steigert, and W. W. Watson—2100
Spallation-fission competition in astatine compound nuclei formed by heavy-ion bombardment, T. Darrah Thomas, Glen E. Gordon, Robert M. Latimer, and Glenn T. Seaborg—1805
Nuclear Reactions induced by α Particles and He^3 (see also **Scattering of α Particles and He^3**)
Application of recoil techniques to study of reactions $Ra^{226}(\alpha,4n)Th^{226}$, $Pb^{208}(\alpha,2n)Po^{210}$, and $Pb^{207}(\alpha,n)Po^{210}$, John R. Morton, III, and Bernard G. Harvey—1798
Elastic and inelastic scattering of 43-MeV α particles by Ni^{58} and Ni^{60}, H. W. Broek, T. H. Braid, J. L. Yntema, and B. Zeidman—1514
Evaporation of coincident protons in $\alpha+Ni^{58}$ reactions, D. Bodansky, R. K. Cole, W. G. Cross, C. R. Gruhn, and I. Halpern—1082
Fission fragment angular distributions and saddle deformations, R. Chaudhry, R. Vandenbosch, and J. R. Huizenga —220
He-ion-induced fission of Bi, Pb, Tl, and Au, J. R. Huizenga, R. Chaudhry, and R. Vandenbosch—210
Low-energy neutrons from reaction $Be^9(\alpha,n)C^{12}$, F. A. St. Romain, T. W. Bonner, R. L. Bramblett, and J. Hanna —1794

Nuclear Reactions induced by α Particles and He^3 (Continued)
Proton angular distributions for (α,p) reactions on C^{12}, Al^{27}, and P^{31}, A. J. Lieber, F. H. Schmidt, and J. B. Gerhart—1496
Nuclear Reactions Induced by Deuterons and Tritons (see also **Scattering of Deuterons and Tritons**)
Distortion effects in $Ca^{40}(d,p)Ca^{41}$ reaction, W. Tobocman and W. R. Gibbs—1076
Gross structure and 1*d*-shell nuclei, W. C. Parkinson and J. R. Maxwell—1160
Location of single-particle levels in medium mass nuclei, B. L. Cohen, R. H. Fulmer, and A. L. McCarthy—698
Stripping with 28-MeV deuterons, R. J. Slobodrian—1059
Nuclear Reactions Induced by Mesons and Hyperons (see also **Elementary Particle Interactions; Mesons and Hyperons; Scattering of Mesons and Hyperons**)
μ capture with six nucleon form factors, J. Barclay Adams—1567
Positive-pion cross sections on complex nuclei, John C. Caris, Edward A. Knapp, Victor Perez-Mendez, and Walton A. Perkins—295
Nuclear Reactions Induced by Neutrons and Antineutrons (see also **Elementary Particle Interactions; Scattering of Neutrons and Antineutrons**)
Elastic and inelastic scattering of fast neutrons from Th^{232}, Alan B. Smith—718
Energy dependence of prompt $\bar{\nu}$ for neutron-induced fission of U^{235}, J. W. Meadows and J. F. Whalen—197
Excitation function of reaction $Ti^{47}(n,p)Sc^{47}$ at neutron energies between 2.2 and 3.6 MeV, L. González, A. Trier, and J. J. van Loef—271
14.5-MeV neutron-induced fission of U^{238}, K. M. Broom—627
Neutron-induced disintegrations of Li^6 and Li^7, L. Rosen and L. Stewart—1150
Nuclear-charge distribution in low-energy fission, Arthur Wahl, Robert L. Ferguson, David R. Nethaway, David E. Troutner, and Kurt Wolfsberg—1112
Nuclear Reactions Induced by Protons and Antiprotons (see also **Elementary Particle Interactions; Scattering of Protons and Antiprotons**)
Fission of Ag and Br in nuclear emulsion by 1.0–3.0-BeV protons, E. W. Baker and S. Katcoff—729
Investigation of light fragmentation products and peculiarities of nuclear fission at high energies of incident particles, P. A. Goritchev, V. F. Darovskikh, O. V. Lozhkin, A. I. Obukhov, N. A. Perfilov, and U. P. Jakovlev—2196
Isobaric states in nonmirror nuclei, J. D. Anderson, C. Wong, and J. W. McClure—2170
Isobaric yields in reactions of 2.9-BeV protons with As^{75}, Sheldon Kaufman—1189
Nuclear reactions of Ta with 5.7-GeV protons, J. Robb Grover—1540
Particle production at large angles by 30- and 33-BeV protons, V. L. Fitch, S. L. Meyer, and P. A. Piroué—1849
Recoil behavior of $Cu^{65}(p,pn)Cu^{64}$ reaction, E. R. Merz and A. A. Caretto, Jr.—1173
$S^{32}(p,p'\gamma)$ angular correlations from 5.7 to 6.34 MeV, H. Hulubei, N. Martalogu, J. Frantz, M. Ivascu, N. Scintei, A. Berinde, and I. Neamu—2174
Spallation of Cu with 24-GeV protons, G. Rudstam, E. Bruninx, and A. C. Pappas—1852
Nuclear Scattering (see **Scattering**)
Nuclear Spectra (see also **Nuclear Reactions; Radioactivity**)
α-emitting isomeric state of Tb^{149}, Ronald D. Macfarlane—274
β decay in stellar interiors, John N. Bahcall—1143
β-γ directional correlation in Eu^{154}, S. K. Bhattacherjee and S. K. Mitra—1154
Comparison of α-particle energies from Po^{210} and Po^{214} and energy of Po^{210} α particles, Cornelius P. Browne—1139
Conserved current hypothesis and β decay of RaE, Jun-Ichi Fujita—202
Coulomb excitation of second 2+ states in Ge^{74}, Ge^{76}, Se^{76}, Se^{78}, and Se^{80}, F. K. McGowan and P. H. Stelson—257
Decay of 18-min Br^{80}, P. N. Trehan and D. M. Van Patter—266
Decay of 2.1-h Ta^{178}, C. J. Gallagher, Jr., and H. L. Nielsen—1520
Decay studies of even-even isotopes, Er^{172} and Dy^{166}, Ray Gunnink and A. W. Stoner—642
Electric dipole ground-state transition width strength function and 7-MeV photon interactions, Peter Axel—671
Elliptical polarization of Fe^{57} γ rays, H. Frauenfelder, D. E. Nagle, R. D. Taylor, D. R. F. Cochran, and W. M. Visscher—1065
Excitation function of reaction $Ti^{47}(n,p)Sc^{47}$ at neutron energies between 2.2 and 3.6 MeV, L. González, A. Trier, and J. J. van Loef—271
Induced pseudoscalar interaction and low-energy anomalies in β spectra, J. M. Pearson—1100
Lifetimes of first excited states of C^{13} and B^{10}, J. Lowe, C. L. McClelland, and J. V. Kane—1811
Lifetimes of some rotational levels, M. Birk, A. E. Blaugrund, G. Goldring, E. Z. Skurnik, and J. S. Sokolowski—726
Measurement of magnetic moment of 279-keV state in Tl^{203} using resonance fluorescence, B. I. Deutch—1168
New isotope In^{106}, Richard C. Catura and J. Reginald Richardson—646
Nuclear rotational spectra, Elliott model, and P_2 force, Raymond S. Willey—1127
Positron emission in decay of K^{40}, D. W. Engelkemeir, K. F. Flynn, and L. E. Glendenin—1818
Nuclear Structure Theory (see also **Nuclear Reactions; Nuclear Spectra**)
Coupling of angular momenta in two-particle states in deformed even-even nuclei, C. J. Gallagher, Jr.—1525
Dependence of neutron production in fission on rate of change of nuclear potential, Robert W. Fuller—684
Electric dipole ground-state transition width strength function and 7-MeV photon interactions, Peter Axel—671
Electromagnetic properties of low-lying states of $_6C_6^{12}$ in oscillating drop model, J. D. Walecka—663
Electron scattering from quantized liquid drop, J. D. Walecka—653
F^{17} level parameters, S. R. Salisbury and H. T. Richards—2147
Formal theory of rearrangement collisions. II, M. H. Mittleman—373
Gross structure and 1*d*-shell nuclei, W. C. Parkinson and J. R. Maxwell—1160
Heavy-particle stripping and structure of N^{14}, D. R. Inglis—1789
Higher random phase approximation and energy spectra of spherical nuclei, J. Sawicki—2231
Location of single-particle levels in medium mass nuclei, B. L. Cohen, R. H. Fulmer, and A. L. McCarthy—698
Momentum distributions for protons in Li^6 cluster model, J. Strnad—2262(E)
Neutron $d_{\frac{1}{2}}^n$ configurations in Zr isotopes, Igal Talmi—2116
Nuclear rotational spectra, Elliott model, and P_2 force, Raymond S. Willey—1127
Optical potential for closely coupled states, M. H. Mittleman and Robert Pu—370
Self-consistent determination of effective radii of heavy nuclei for α-particle emission, D. H. Wilkinson—648
Seniority of $f_{7/2}^4$ levels in Cr^{52}, I. Talmi—1096

Optical Instruments (see **Methods and Instruments**)
Optical Properties (see also **Luminescence**)
Absorption and fluorescence of Sm^{3+} in CaF_2, SrF_2, and BaF_2, D. L. Wood and W. Kaiser—2079
Continuous operation of solid-state optical maser, L. F. Johnson, G. D. Boyd, K. Nassau, and R. R. Soden—1406
Cooperative optical absorption in solids, D. L. Dexter—1962
Effect of high electric field on absorption of light by PbI_2 and HgI_2, Richard Williams—442
Far infrared dielectric dispersion in $BaTiO_3$, $SrTiO_3$, and TiO_2, W. G. Spitzer, Robert C. Miller, D. A. Kleinman, and L. E. Howarth—1710
Influence of resonant absorber whose thickness varies linearly with time on special shape of incident Lorentzian wave packet, I. Nowik—1878
Infrared sensitivity of ZnS:Cu:Co phosphor, B. Goldstein and J. J. Dropkin—966
Low-temperature paramagnetic relaxation of color centers in KCl, W. D. Ohlsen and D. F. Holcomb—1953
Nonlinear dielectric polarization in optical media, D. A. Kleinman—1977
Optical absorption of As-doped degenerate Ge, J. I. Pankove and P. Aigrain—956
Optical emission from irradiated foils. I, R. H. Ritchie and H. B. Eldridge—1935
Optical emission from irradiated foils. II, A. L. Frank, E. T. Arakawa, and R. D. Birkhoff—1947
Photoequilibrium between KCl F and F' centers at 80°K, A. Costikas and L. I. Grossweiner—1410
Photomagnetothermal effect in semiconductors, W. W. Gärtner, C. Loscoe, and H. Mette—1680
Quantum mechanical effects in stimulated optical emission, Roscoe C. Williams—1011
Sharp-line fluorescence, electron paramagnetic resonance, and thermoluminescence of Mn^{4+} in α-Al_2O_3, S. Geschwind, P. Kisliuk, M. P. Klein, J. R. Remeika, and D. L. Wood—1684
Spectroscopy and luminescence properties of CdF_2:Eu, J. D. Kingsley and J. S. Prener—458
Temperature-dependent linewidth of excited states in crystals. I. Line broadening due to adiabatic variation of local fields, A. Kiel—1292

Pair Production (see **Electrons and Positrons**)
Parity (see **Elementary Particle Interactions; Field Theory; Nuclear Spectra**)
Phosphors and Phosphorescence (see **Luminescence; Semiconductors**)
Photoconductivity (see **Electrical Conductivity and Resistance**)
Photodisintegration (see **Nuclear Photoeffects**)
Photoelasticity (see **Elasticity and Plasticity**)
Photoelectric Effect (see **Electrical Properties**)
Photomagnetoelectric Effect (see **Electrical Conductivity and Resistance**)
Photography and Photographic Emulsions (see **Methods and Instruments; Optical Properties**)
Photons (see **Radiation**)
Photovoltaic Effect (see **Electrical Properties; Semiconductors**)
Piezoelectric Effect (see **Dielectrics and Dielectric Properties; Electrical Properties**)
Plasma Physics (see also **Crystalline State; Electrical Conductivity and Resistance; Electrical Discharges; Fluid Dynamics; Statistical Mechanics and Thermodynamics**)
Eikonal method in magnetohydrodynamics, Steven Weinberg—1899
Energy loss of fast ion in plasma, S. T. Butler and M. J. Buckingham—1
Landau damping to all orders, David Montgomery and David Gorman—2261(E)
Magnetically confined plasma with Maxwellian core, George Schmidt and David Finkelstein—1611
Radiation in plasma. II. Equivalent sources, Marshall H. Cohen—389
Radiation in plasma. III. Metal boundaries, Marshall H. Cohen—398
Volume recombination, constriction, and volt-ampere characteristics of positive column, Carl Kenty—1235
Plasticity (see **Elasticity and Plasticity**)
Polarization, Electrical (see **Dielectrics and Dielectric Properties**)
Polymers (see **Molecular Aggregates**)
Positronium (see **Atomic Structure and Spectra; Electrons and Positrons**)
Positrons (see **Electrons and Positrons**)
Probability (see **Mathematical Methods**)
Protons (see **Elementary Particle Interactions**)

Quantum Electrodynamics (see also **Field Theory**)
Angular distribution of relativistic atomic K-shell photoelectrons, T. A. Weber and C. J. Mullin—615
Annihilation of positrons from H^-e^+ ground state, S. M. Neamtan, G. Darewych, and G. Oczkowski—193
Bremsstrahlung accompanying high-energy π meson-proton collisions, H. Überall—861
Connection between gauge invariance and mass, David G. Boulware and Walter Gilbert—1563
Multiple production of photons in quantum electrodynamics, Kalyana T. Mahanthappa—329
Radiative corrections to Coulomb scattering asymmetry function, W. R. Johnson, C. O. Carroll, and C. J. Mullin—352
Structure-independent electrodynamics in electric dipole approximation, Ralph Schiller and Melvin Schwartz—1582
Quantum Mechanics
Angular momenta in relativistic three-body systems, B. Barsella and E. Fabri—1561
Atomic many-body problem. I. General theory of correlated wave functions, Levente Szász—169
Coordinate covariance and particle spectrum, D. W. Joseph—319
Indeterminate character of reduction of wave packet in quantum theory, Arthur Komar—365
Large-time exponential decay and "hidden variables," Rolf G. Winter—1152
New class of classical uncertainty relations giving uncertainty for long and certainty for short times, Eugene Guth—1213
Perturbation theory for Fock-Dirac density matrix, R. McWeeny—1028
Quantization and classical Hamilton-Jacobi equation, Lloyd Motz—378
Remarks on relativistic Kepler problem, L. C. Biedenharn—845
Solution of Schrödinger equation for a periodic lattice. II, Leonard Eyges—93
Wave equations in curved space-time, S. Datta Majumdar—2227
Quenching of Radiation (see **Radiation**)

Radiation (see also **Gamma Rays; Range and Energy Loss; X Rays**)
Altitude dependence of longitudinal distribution of atmospheric Čerenkov radiation, Forrest I. Boley, John A. Palsedge, and James H. Baum—734
Angular distribution of relativistic atomic K-shell photoelectrons, T. A. Weber and C. J. Mullin—615
Elastic scattering at resonance from bound nuclei, G. T. Trammell—1045

Radiation (Continued)
Elastic scattering of 11.5–17.7-MeV photons by Au measured with a bremsstrahlung monochromator, J. S. O'Connell, P. Tipler, and P. Axel—228
Electromagnetic production of charged vector mesons, Sidney A. Bludman and James A. Young—303
Electromagnetic radiation from nuclear explosion in space, W. J. Karzas and R. Latter—1919
Electron photodetachment from ions and elastic collision cross sections for O, C, Cl, and F, John W. Cooper and Jerry B. Martin—1482
Hole burning effects in He-Ne optical maser, W. R. Bennett, Jr.—580
Optical emission from irradiated foils. I, R. H. Ritchie and H. B. Eldridge—1935
Optical emission from irradiated foils. II, A. L. Frank, E. T. Arakawa, and R. D. Birkhoff—1947
Radiation in plasma. II. Equivalent sources, Marshall H. Cohen—389
Radiation in plasma. III. Metal boundaries, Marshall H. Cohen—398

Radioactivity (see also **Nuclear Spectra**)
Comparison of α-particle energies from Po^{210} and Po^{214} and energy of Po^{210} α particles, Cornelius P. Browne—1139
Large-time exponential decay and "hidden variables," Rolf G. Winter—1152
Mike results—implications for spontaneous fission, David W. Dorn—693
New isotope In^{106}, Richard C. Catura and J. Reginald Richardson—646
Positron emission in decay of K^{40}, D. W. Engelkemeir, K. F. Flynn, and L. E. Glendenin—1818
Self-consistent determination of effective radii of heavy nuclei for α-particle emission, D. H. Wilkinson—648

Raman Spectra (see **Molecular Structure and Spectra**)

Range and Energy Loss (see also **Scattering**)
Angular distribution and ranges of N^{13} particles resulting from 27.5-MeV N^{14} ions on Mg^{24}, K. S. Toth—1489
Electron energy distribution in slightly ionized air under influence of electric and magnetic fields, Nathaniel P. Carleton and Lawrence R. Megill—2089
Energy loss of fast ion in plasma, S. T. Butler and M. J. Buckingham—1
Energy losses and collective excitations in crystal, Stanley Engelsberg—1262
Inelastic scattering of electrons in Ge, Joseph Callaway and Fred W. Cummings—5
Interpretation of range measurements for kV electrons in solids, H. Kanter and E. J. Sternglass—620
Monte Carlo calculation of transport of fast electrons, J. F. Perkins—1781
Range of heavy ions in solids, D. Powers and W. Whaling—61

Recombination (see **Molecular Structure and Spectra**)

Relativity and Gravitation
Angular momenta in relativistic three-body systems, B. Barsella and E. Fabri—1561
Asymptotic properties of system with nonzero total mass, Peter G. Bergmann, Ivor Robinson, and Engelbert Schücking—1227
Coordinate covariance and particle spectrum, D. W. Joseph —319
Lee-Yang vector field and isotropy of universe, R. H. Dicke —1580
Three-dimensional geometry as carrier of information about time, Ralph F. Baierlein, David H. Sharp, and John A Wheeler—1864
Wave equations in curved space-time, S. Datta Majumdar —2227

Resistance, Electrical (see **Electrical Conductivity and Resistance**)

Resonance Radiation (see **Radiation**)

Scattering, General (see also **Diffraction; Elementary Particle Interactions; Nuclear Reactions; Range and Energy Loss**)
Analysis of multichannel reactions, Gordon L. Shaw and Marc H. Ross—806
Behavior of scattering amplitudes at high energies, bound states, and resonances, R. Blankenbecler and M. L. Goldberger—766
Corrections to impulse approximation in scattering from deuterons, Allen Everett—831
Elastic scattering at resonance from bound nuclei, G. T. Trammell—1045
Fixed-angle dispersion relations for nucleon Compton scattering. I, A. C. Hearn and E. Leader—789
Formal theory of rearrangement collisions. II, M. H. Mittleman—373
Linde's law and scattering power of associated point defects, C. P. Flynn—533
New scattering approximation, Henry Brysk—1589
Nucleon-nucleon triplet-even potentials, Norman K. Glendenning and Gustav Kramer—2159
Optical potential for closely coupled states, M. H. Mittleman and Robert Pu—370
Scattering of O ions from Ar and Xe, J. G. Kelley, F. E. Steigert, and W. W. Watson—2100
Scattering of thermal rare gas beams by Ar. Influence of long-range dispersion forces, Erhard W. Rothe, Lawrence L. Marino, R. H. Neynaber, P. K. Rol, and S. M. Trujillo —598

Scattering of α particles and He^3 (see also **Nuclear Reactions Induced by α Particles and He^3**)
Coulomb excitation of second 2+ states in Ge^{74}, Ge^{76}, Se^{76}, Se^{78}, and Se^{80}, F. K. McGowan and P. H. Stelson—257
Elastic and inelastic scattering of 43-MeV α particles by Ni^{58} and Ni^{60}, H. W. Broek, T. H. Braid, J. L. Yntema, and B. Zeidman—1514

Scattering of Atoms and Molecules (see **Atomic and Molecular Beams**)

Scattering of Deuterons and Tritons (see also **Nuclear Reactions Induced by Deuterons and Tritons**)

Scattering of Electrons and Positrons (see also **Electrons and Positrons**)
Elastic scattering of low-energy electrons by atomic hydrogen, Philip Burke and Harry M. Schey—147
Electron photodetachment from ions and elastic collision cross sections for O, C, Cl, and F, John W. Cooper and Jerry B. Martin—1482
Electron-proton scattering at low momentum transfers, P. Lehmann, R. Taylor, and Richard Wilson—1183
Electron scattering from quantized liquid drop, J. D. Walecka—653
Energy losses and collective excitations in crystal, Stanley Engelsberg—1262
Inelastic scattering of electrons in Ge, Joseph Callaway and Fred W. Cummings—5
Nonadiabatic theory of electron-H scattering, A. Temkin—130
Plural scattering of 20-keV electrons in Al, L. Marton, J. Arol Simpson, H. A. Fowler, and N. Swanson—182
Polarization and correlation of electron spin in low-energy elastic electron-H collisions, P. G. Burke and H. M. Schey—163
Radiative corrections to Coulomb scattering asymmetry function, W. R. Johnson, C. O. Carroll, and C. J. Mullin—352

Scattering of Mesons and Hyperons (see also **Mesons and Hyperons; Nuclear Reactions Induced by Mesons and Hyperons**)

Effective range analysis of s-wave K^-p reactions, Gordon L. Shaw and Marc H. Ross—814
Evidence concerning pion-pion interactions below 765-MeV pion-pion resonance, C. Clyde Peck, Lawrence W. Jones, and Martin L. Perl—1836
$I=2$ s-wave π-π scattering length, Janos Kirz, Joseph Schwartz, and Robert D. Tripp—763
Mott scattering of polarized muons, Marcel Bardon, Paolo Franzini, and Juliet Lee—1826
π^-+p interaction at 1.3 BeV, W. D. Shephard and W. D. Walker—278
$\pi^-+p \rightarrow \pi^0+n$ charge exchange cross sections at 20.7 and 31.0 MeV, K. Miyake, K. F. Kinsey, and D. E. Knapp—2188
Pion-nucleon processes above first maximum according to strong-coupling method, Helmut Jahn—824
Polarization in π^-+p scattering between 500 and 940 MeV, E. F. Beall, B. Cork, P. G. Murphy, W. A. Wenzel, C. M. P. Johnson, and L. J. Koester, Jr.—1554
Positive-pion cross sections on complex nuclei, John C. Caris, Edward A. Knapp, Victor Perez-Mendez, and Walton A. Perkins—295
Theory of P-wave π-Λ resonance, Saul Barshay—1232

Scattering of Neutrons (see also **Nuclear Reactions Induced by Neutrons**)
Corrections to impulse approximation in scattering from deuterons, Allen Everett—831
Elastic and inelastic scattering of fast neutrons from Th^{232}, Alan B. Smith—718
Elastic scattering at resonance from bound nuclei, G. T. Trammell—1045
Neutron coherent scattering amplitudes for Cd and Eu, G. Arnold and N. Nereson—2262(E)
Note on nucleon-nucleon potential, K. E. Lassila, M. H. Hull, Jr., H. M. Ruppel, F. A. McDonald, and G. Breit—881
Polarization and differential cross section for neutron scattering from Si, R. O. Lane, A. J. Elwyn, and A. Langsdorf, Jr.—1105
Quasi-classical treatment of neutron scattering, R. Aamodt, K. M. Case, M. Rosenbaum, and P. F. Zweifel—1165
Scattering of neutrons by α particles, S. M. Austin, H. H. Barschall, and R. E. Shamu—1532
Scattering of slow neutrons by solid and liquid terphenyls, Robert M. Brugger—29
Scattering of small wavelength neutrons by gas of hard spheres, G. H. A. Cole—383
Stochastic model of liquid and cold neutron scattering. II, A. Rahman, K. S. Singwi, and A. Sjölander—997
Studies of optics of neutrons. I. Measurement of neutron-proton coherent scattering amplitude by mirror reflection, W. C. Dickinson, L. Passell, and O. Halpern—632
Theory of slow neutron scattering by liquids. I, A. Rahman, K. S. Singwi, and A. Sjölander—986
Transmission of polarized neutrons through samples of polarized Ho^{165} nuclei, Hans Postma, H. Marshak, V. L. Sailor, F. J. Shore, and C. A. Reynolds—979

Scattering of Protons and Antiprotons (see also **Nuclear Reactions Induced by Protons and Antiprotons**)
Corrections to impulse approximation in scattering from deuterons, Allen Everett—831
Electron capture from atomic H by protons, Robert A. Mapleton—1477
F^{17} level parameters, S. R. Salisbury and H. T. Richards—2147
High-energy proton scattering from carbon and deuterium, G. Cocconi, A. N. Diddens, E. Lillethun, G. Manning, A. E. Taylor, T. G. Walker, and A. M. Wetherell—277
Note on nucleon-nucleon potential, K. E. Lassila, M. H. Hull, Jr., H. M. Ruppel, F. A. McDonald, and G. Breit—881
p-O^{16} differential scattering cross sections. II, S. R. Salisbury, G. Hardie, L. Oppliger, and R. Dangle—2143

Scattering of Radiation (see **Gamma Rays; Radiation; X Rays**)
Scintillation Counters (see **Methods and Instruments**)
Secondary Emission (see **Electrical Properties**)

Semiconductors
Degenerate Ge. I. Tunnel, excess, and thermal current in tunnel diodes, Dietrich Meyerhofer, George A. Brown, and H. S. Sommers, Jr.—1329
Diffusion of hot and cold electrons in semiconductor barriers, R. Stratton—2002
Drift velocity and anisotropy of hot electrons in n Ge, H. O. Reik and H. Risken—1737
Effects of spin-orbit coupling in Si and Ge, L. Liu—1787
Inelastic scattering of electrons in Ge, Joseph Callaway and Fred W. Cummings—5
Optical absorption of As-doped degenerate Ge, J. I. Pankove and P. Aigrain—956
Photomagnetothermal effect in semiconductors, W. W. Gärtner, C. Loscoe, and H. Mette—1680
Precipitation of Te and Pb in PbTe crystals, W. W. Scanlon—509
Radiation-induced recombination and trapping centers in Ge. II. Annealing in γ-irradiated, Sb- and As-doped material, O. L. Curtis, Jr., and J. H. Crawford, Jr.—1342
Surface conductivity of cleaved Si surfaces, Paul Handler—971
Theory of band structure of very degenerate semiconductors, P. A. Wolff—405
Theory of tunneling and its dependence on longitudinal magnetic field, Petros N. Argyres—1386
Treatment of ionized impurity scattering in degenerate semiconductors. Application of variational technique in partial wave method, P. Csavinszky—1436
Ultrasonic amplification in semimetals, W. P. Dumke and R. R. Haering—1974

Shock Waves (see **Fluid Dynamics**)
Solid State (see **Crystalline State**)
Sound (see **Acoustics**)
Spallation (see **Nuclear Reactions**)
Spark Discharge (see **Electrical Discharges**)
Specific Heat (see **Thermal Properties**)
Spectra, Atomic (see **Atomic Structure and Spectra**)
Spectra, General
Spectra, Molecular (see **Molecular Structure and Spectra**)
Spectra, Nuclear (see **Nuclear Spectra**)
Spectroscopy Technique (see **Methods and Instruments**)
Spinor Fields (see **Field Theory**)
Standards (see **Constants, Standards, Units**)
Stark Effect (see **Atomic Structure and Spectra**)

Statistical Mechanics and Thermodynamics
Binary collision expansion of classical N-body Green's function, Jerome Weinstock—341
Bose-Einstein condensation of excitons, John M. Blatt, K. W. Böer, and Werner Brandt—1691
Certain general order-disorder models in limit of long-range interactions, George A. Baker, Jr.—2071
Correlation function calculation of thermal conductivity, William C. Schieve and Robert L. Peterson—1458
Fusion curve and polymorphic transitions of Cs at high pressures, G. C. Kennedy, A. Jayaraman, and R. C. Newton—1363
Higher random phase approximation and energy spectra of spherical nuclei, J. Sawicki—2231
Indirect exponential coupling in classical many-body problems, Emmanuel Meeron—883

Statistics Mechanics and Thermodynamics (Continued)
Long-range order of linear antiferromagnetic chain, N. Karayianis, C. A. Morrison, and D. E. Wortman—1443
Magnetic disorder as first-order phase transformation, C. P. Bean and D. S. Rodbell—104
Role of *e-e* collisions in galvanomagnetic effects, B. V. Paranjape and Benjamin U. Stewart—1668
Scattering of small wavelength neutrons by gas of hard spheres, G. H. A. Cole—383
Soluble many-body problem for particles in Coulomb potential, M. Moshinsky—1880
Some remarks on correlations in classical order-disorder phenomena, Frank H. Stillinger, Jr.—1239
Stability of plane wave Hartree-Fock ground state, Fumiaki Iwamoto and Katuro Sawada—887
Stochastic model of liquid and cold neutron scattering. II, A. Rahman, K. S. Singwi, and A. Sjölander—997
Theory of slow neutron scattering by liquids. I, A. Rahman, K. S. Singwi, and A. Sjölander—986
Statistical Methods (see **Mathematical Methods**)
Strange Particles (see **Elementary Particle Interactions; Mesons and Hyperons**)
Superconductivity
Boundary scattering effects on superconducting transition temperature of In, Ernest A. Lynton and David McLachlan—40
Flux quantization and current-carrying state in superconducting cylinder, H. J. Lipkin, M. Peshkin, and L. J. Tassie—116
Functional derivative techniques in theory of superconductivity, Stanley Engelsberg—1251
Low-temperature specific heat of bcc Ti-V alloys, C. H. Cheng, K. P. Gupta, E. C. van Reuth, and Paul A. Beck—2030
Magnetic field dependence of surface impedance of superconducting Sn at 3 kMc/sec, P. L. Richards—912
Nuclear spin-lattice relaxation in superconducting Al alloys, Yoshika Masuda—1271
Specific heats of Sn alloys and their relation to superconducting transition temperature, R. I. Gayley, Jr., E. A. Lynton, and B. Serin—43
Theory of superconductivity. I. Electron-lattice interaction, R. K. Nesbet—2014
Thermal conductivity of dilute In-Hg alloys, A. M. Toxen, G. K. Chang, and R. E. Jones—919
Thermodynamic consistency of critical field and specific heat data for superconducting Sn and In, D. E. Mapother—2021
Tunneling into superconductors at temperatures below 1°K, I. Giaever, H. R. Hart, Jr., and K. Megerle—941
Supersonics (see **Fluid Dynamics**)
Surface Physics
Sputtering experiments in Rutherford collision region, Manfred Kaminsky—1267
Surface conductivity of cleaved Si surfaces, Paul Handler—971

Thermal Conductivity (see **Thermal Properties**)
Thermal Diffusion (see **Diffusion**)
Thermal Expansion (see **Thermal Properties**)
Thermal Properties
Anharmonic contributions to specific heat, Joseph M. Keller and Duane C. Wallace—1275
Anomalous lattice specific heat of Au and Zn at liquid He temperatures, J. E. Zimmerman and L. T. Crane—513
Correlation function calculation of thermal conductivity, William C. Schieve and Robert L. Peterson—1458
Debye-Waller factor for Mössbauer resonant impurity atoms, A. A. Maradudin and P. A. Flinn—2059
Electrical and thermal resistivities and Fermi surface of monovalent metals, S. K. Joshi and B. M. S. Kashyap—935
Fusion curve and polymorphic transitions of Cs at high pressures, G. C. Kennedy, A. Jayaraman, and R. C. Newton—1363
Lattice thermal conductivity at low temperatures, Bal Krishna Agrawal and G. S. Verma—24
Low-temperature specific heat of bcc Ti-V alloys, C. H. Cheng, K. P. Gupta, E. C. van Reuth, and Paul A. Beck—2030
Low-temperature specific heat of Ti alloys with CsCl-type ordered structure, E. A. Starke, Jr., C. H. Cheng, and Paul A. Beck—1746
Photomagnetothermal effect in semiconductors, W. W. Gärtner, C. Loscoe, and H. Mette—1680
Specific heat of Dy metal between 0.4° and 4°K, O. V. Lounasmaa and R. A. Guenther—1357
Specific heat of Sm metal between 0.4° and 4°K, O. V. Lounasamaa—1352
Specific heats of Sn alloys and their relation to superconducting transition temperature, R. I. Gayley, Jr., E. A. Lynton, and B. Serin—43
Thermal conductivity of dilute In-Hg alloys, A. M. Toxen, G. K. Chang, and R. E. Jones—919
Thermal conductivity of MgO, Al_2O_3, $MgAl_2O_4$, and Fe_3O_4 crystals from 3°K and 300°K, Glen A. Slack—427
Thermal conductivity of solids. III. Modification of three-phonon processes by isotopic scattering, P. Carruthers—1448
Thermal Radiation (see **Radiation**)
Thermionic Emission (see **Electrical Properties**)
Thermodynamics (see **Statistical Mechanics and Thermodynamics**)
Thermoelectric Effect (see **Electrical Properties; Semiconductors**)
Thermoluminescence (see **Luminescence**)
Thermomagnetic Effect (see **Magnetic Properties**)
Total Cross Sections (see **Electrons and Positrons; Nuclear Reactions**)

Units (see **Constants, Standards, Units**)

Van der Waals Forces (see **Molecular Structure and Spectra**)
Viscosity (see **Liquids**)

Wave Mechanics (see **Quantum Mechanics**)
Work Function (see **Electrical Properties**)

X Rays
Effect of thermal vibrations on diffraction from perfect crystals. I. Case of anomalous transmission, Boris W. Batterman—1461
Structure sensitivity of *F*-center generation by x rays at low temperatures, Charles L. Bauer and Robert B. Gordon—73
Total x-ray attenuation coefficients from 40 keV to 412 keV, M. Wiedenbeck—1009